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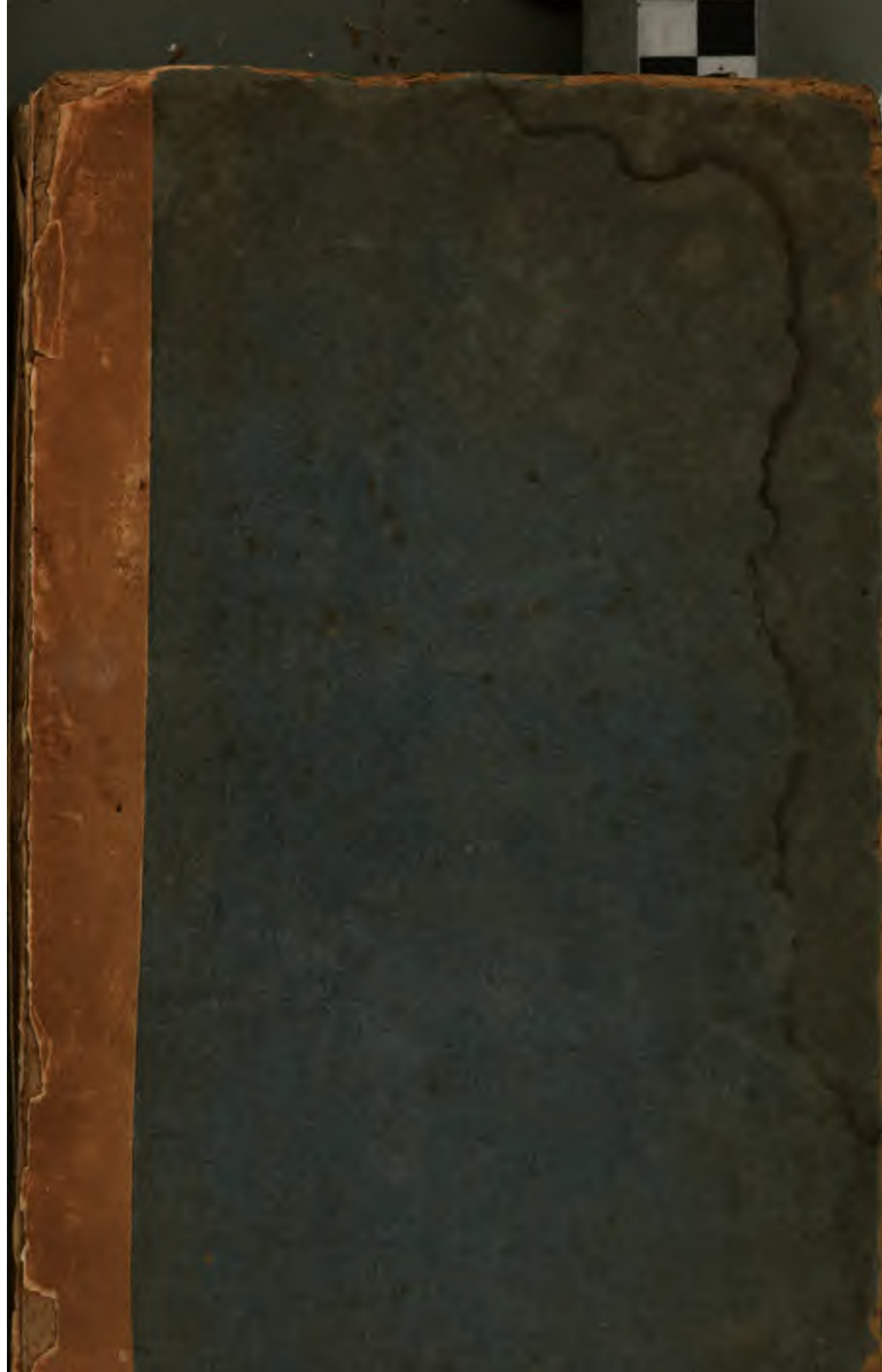
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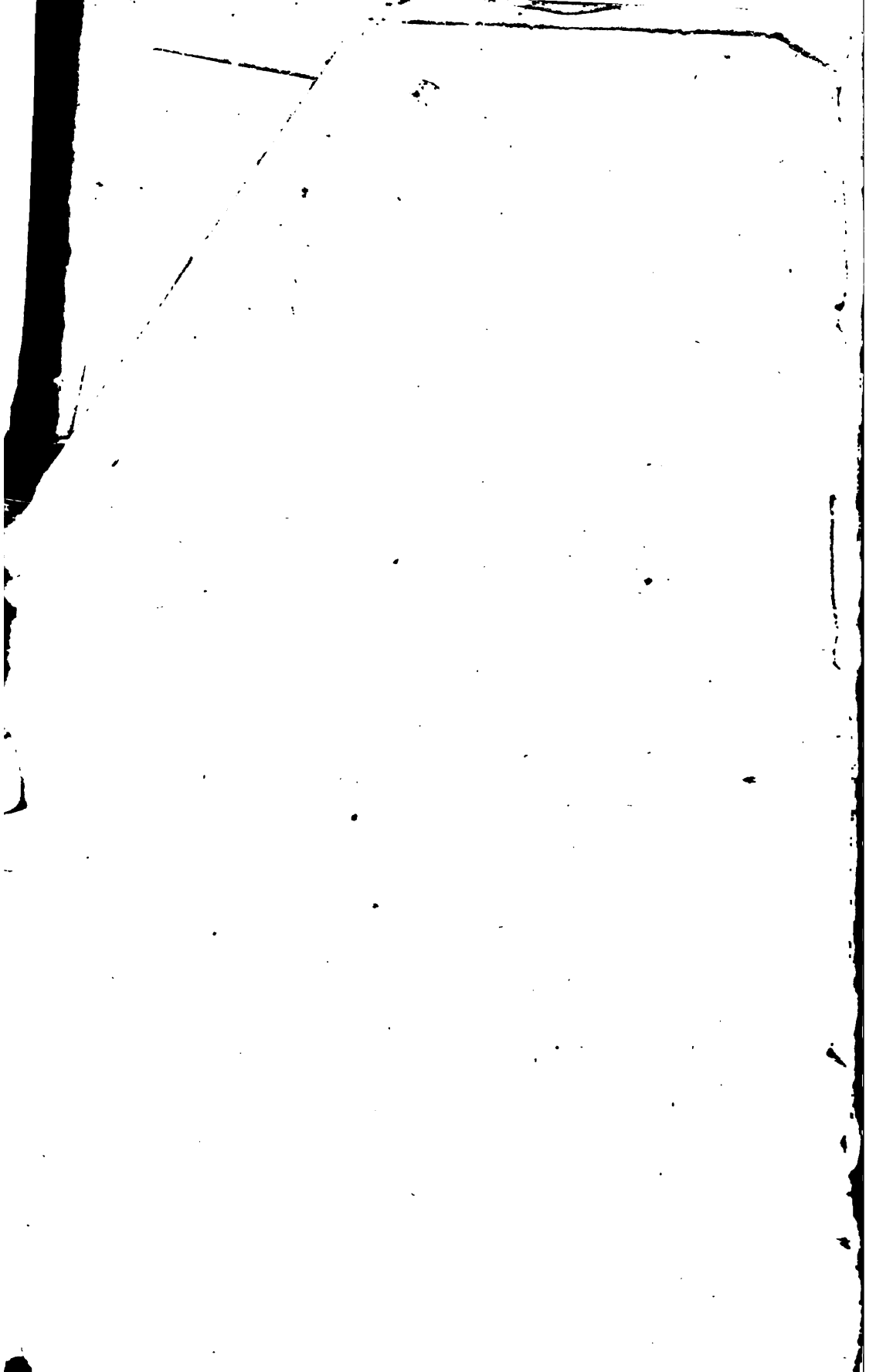


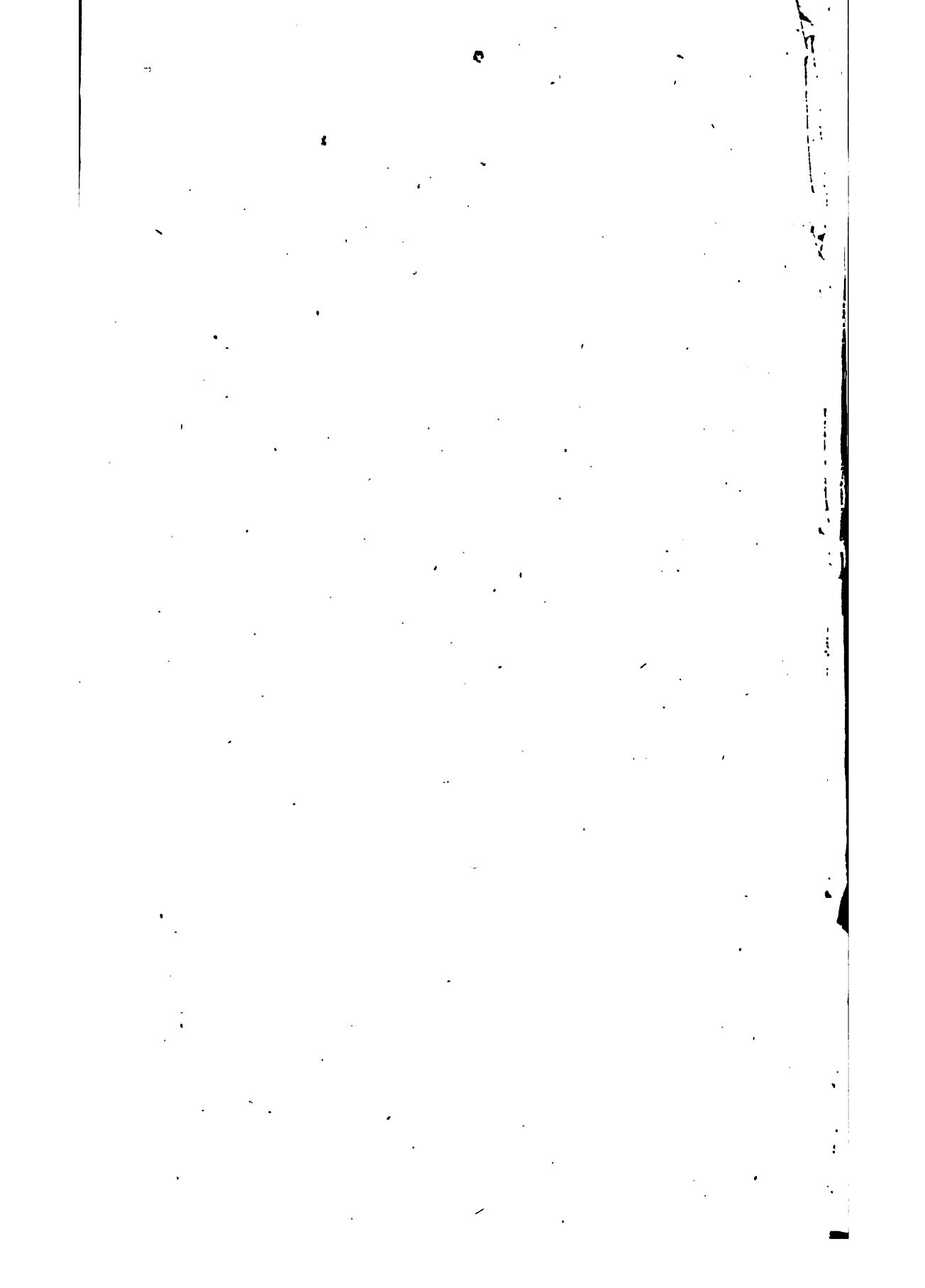
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GEO. C. SHATTUCK.

ELEMENTS

OF

Intellectual Philosophy:

DESIGNED AS A TEXT-BOOK.

by
Thomas C. Upham.

PORTLAND,

PUBLISHED BY WILLIAM HYDE.

JOSEPH GRIFFIN—PRINTER—BRUNSWICK.

1827.

DISTRICT OF MAINE, ss.

BE IT REMEMBERED. That on this 20th day of January, A.D. 1827, in the fifty first year of the Independence of the United States of America *Mr Thomas C. Upham*, of the District of Maine, has deposited in this office the title of a book, the right whereof he claims as proprietor, in the words following viz.

"Elements of Intellectual Philosophy: designed as a Text-Book. Portland, published by William Fryde. Joseph Griffin, printer, Brunswick 1827."

In conformity to the act of the Congress of the United States, entitled, "An act for the encouragement of learning by securing the copies of maps, charts, and books to the authors and proprietors of such copies during the times therein mentioned;" and also to an act, entitled "An act, supplementary to an act, entitled, an act for the encouragement of learning, by securing the copies of maps, charts and books to the authors and proprietors of such copies during the times therein mentioned; and extending the benefits thereof to the arts of designing, engraving, and etching historical, and other prints."

JOHN MUSSEY, Jun. Clerk of the District Court of Maine.

Potter.

This book professes to be a compilation, from a considerable number of authors, of those facts and opinions in Intellectual Philosophy, which seemed to the writer most worthy to be received. The authors, who have been chiefly consulted, will be found mentioned in the course of the work; and, in some instances, a few remarks have been made on the character of their writings. Locke, Stewart, and Brown have afforded a greater share of the materials than others; Condillac, Beattie, Malebranche, Hume, Reid, Berkeley, &c. have been carefully consulted. In a few instances, the statements of these writers have been admitted with only slight variations, when it was thought they had been peculiarly happy in them.

The work sets forth no other pretensions, than what is purported in the title page, viz. as a TEXT-BOOK. As such, it is hoped, it will be found acceptable to instructors and students. A book of this kind, in this important department of science, has been for a long time needed; and the present attempt towards supplying the deficiency is submitted to the candid judgment of the publick.

Review. A-29-16 1846

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CHAPTER FIRST.

UTILITY OF INTELLECTUAL PHILOSOPHY.

§. 1. *Of the prejudice existing against this science.*

A prejudice prevails against the science of Intellectual Philosophy. It is generally entered upon in our academies and colleges with reluctance, and relinquished without regret. This aversion is not limited to the idle, but includes those, who know the value of time and the importance of mental improvement.

The objections against the Philosophy of the Mind, which have in a great measure given rise to this prejudice, may be principally summed up in two particulars.

§. 2. *Of the metaphysicks of the schools.*

Of these, one is the frivolous character of the metaphysical writings of the schools.

The origin of those institutions, to which the name of schools is given, was this. By order of a general Council of the Roman Catholick Church, held at Rome in the year 1179, certain persons were appointed to give instructions either in the cathedrals and monasteries, or in some suitable buildings erected near them. The places of instruction were called by the Latin name *SCHOLAE*; the teachers were termed *SCHOLASTICI*. These minor institutions, some of which had an existence previous to the enactment of

the canons of the Council, which has been mentioned, at length grew up into the more imposing shape of seminaries, answering to the publick literary institutions of modern times. But while there was an alteration in the institutions themselves, and universities and colleges in the end arose from these small beginnings, the same appellations continued.

By the **SCHOOLS**, then, are to be understood the European literary and theological institutions, as they were constituted and regulated from about the middle of the twelfth century to the period of the Protestant reformation. By the **SCHOLASTICK PHILOSOPHY**, using the terms in a general sense, we mean those topicks, which were most examined and insisted on during that period.

The learning of the **SCHOOLS** may in general be referred to three great divisions, viz.

ONTOLOGY or the science of Being in general ;—

NATURAL THEOLOGY, which seems to have been the application of the principles of ontology to the particular existences, called God and angels ; and **PNEUMATOLOGY** or doctrines having relation to the human mind.

The following are some of the inquiries, which were warmly agitated during the period now under examination.

Whether the Deity can exist in imaginary space no less than in the space, which is real ? Whether the Deity loves a possible unexisting angel better, than an insect in actual existence ?

Whether the essence of mind be distinct from its existence ? And whether its essence might, therefore, subsist, when it had no actual existence ?

Whether angels can visually discern objects in the dark ? Or whether they can pass from one point of space to another without passing through the intermediate points ?

Such inquiries, it will readily be admitted, were worse than fruitless. But Intellectual Philosophy, as it exists at the present day, evidently ought not to be estimated by what it was in the scholastick ages. If, therefore, the pre-

Judice, which has been mentioned as prevailing against this science, be in any measure founded on the frivolous discussions of the schools, it is so far unjust ; since it is now prosecuted on different principles and with different results.

§. 3. *Supposed practical inutility of this science.*

A second ground of the prejudice, existing against this science, is the prevalence of a false opinion of its practical inutility. In studying Intellectual Philosophy, we are supposed in the erroneous opinion, which has been mentioned, to learn in a scientific form only what we have previously learnt from nature ; we acquire nothing new, and the time, therefore, which is occupied in this pursuit, is mispent.

All persons, however ignorant, know what it is, to think, to imagine, to feel, to perceive, to exercise belief. All persons know the fact in Intellectual Philosophy, that memory depends on attention ; and when asked, why they have forgotten things, which occurred yesterday in their presence, think it a sufficient answer to say, that they did not attend to them. Every body is practically acquainted with the principles of association, even the groom ; who, with all his ignorance of philosophical books, has the sagacity to feed his horses to the sound of the drum and bugle, as a training preparatory to their being employed in military service.

From some facts of this kind, which may safely be admitted to exist, the opinion has arisen of the practical inutility of studying Intellectual Philosophy as a science.

§. 4. *Its supposed practical inutility answered.*

If, however, these facts be admitted to be a valid objection in application to this study, the same objection evidently exists to the study of other sciences, for instance, Natural Philosophy. It is remarked of savages, that they gain an eminence before they throw their missile weapons, in order by the aid of such a position to increase the momentum of what is thrown. They do this without any sci-

entifick knowledge of the accelerating force of gravity. The sailor, who has perhaps never seen a mathematical diagram, practically understands, as is evident from the mode in which he handles the ropes of the vessel, the composition and resolution of forces. In a multitude of instances, we act on principles, which are explained and demonstrated in some of the branches of Natural Philosophy. We act on them, while we are altogether ignorant of the science. But no one, it is presumed, will consider this a good excuse for making no philosophical and systematick inquiries into that department of knowledge.

But without contenting ourselves with this answer to the objection, that the study, upon which we are entering, is of no practical profit, some further remarks will be made, more directly and positively showing its beneficial results.

§. 5. *Intellectual philosophy teaches us how to direct our inquiries.*

It is one of the good results of a knowledge of Intellectual Philosophy, that we are taught by it to limit our inquiries to those subjects, to the investigation of which our capacities are equal and are adapted. The Supreme Being is an all pervading mind, a principle of life, that has an existence in all places and in all space, and whose intelligence is like his omnipresence, acquainted with all things. But man, his creature, is made with an inferiour capacity; he knows only in part, and it is but reasonable to suppose, that there are many things, which he will never be able to know. But, although it be justly admitted, that man is subordinate to the supreme Being and is infinitely inferiour to Him, his Maker has kindly given him aspirations after knowledge, with the power of satisfying in some measure and under certain limitations these natural breathings forth of the soul. If, therefore, man be a being, formed to know, and therẽ be, moreover, certain restrictions, placed upon the capacity of knowledge, it is highly important to ascertain the limitations, whatever they may be, which are imposed. Nor is this always an easy thing to be determin-

ed. There is oftentimes a difficulty in ascertaining precisely the boundary, which runs between the possibility and the impossibility of knowledge, but whenever it is ascertained, there is an indirect increase of mental ability by means of the withdrawal of the mind from unprofitable pursuits, in which there is an expence of effort without any remuneration.

When, for example, a piece of wood, or any other of those material bodies, by which we are surrounded, is presented to any one for his examination, there are some things in this material substance, which may be known, and others, which cannot. Its colour, its hardness or softness, its extension are points, upon which he can inform himself, can reason, can arrive at knowledge. He opens his eye; an impression is made on the organ of vision, and he has the idea of colour. By means of the application of his hand to the wood, he learns the penetrability or impenetrability, the softness or hardness of the mass, which he holds. By moving his hand from one point to another in the mass, he is informed of the continuity or extension of its parts. But when he pushes his inquisition beneath the surface of this body, when he attempts to become acquainted not only with its qualities, but with that supposed something, in which those qualities are often imagined to inhere, and, in a word, expends his efforts, in obedience to this unprofitable determination, in learning what matter is, independently of its properties, he then stumbles on a boundary, which it is not given men to pass, and seeks for knowledge where they are not permitted to know.

The necessity of understanding what things come within the reach of our powers and what do not, was a thought, which laid the foundation of Mr. Locke's Essay on the Human Understanding.

§. 6. *Remarks of Mr. Locke on this point.*

"Were it fit to trouble thee with the history of this Essay (he remarks in the Epistle to the reader) I should tell thee, that five or six friends meeting at my chamber and discours-

ing on a subject very remote from this, found themselves quickly at a stand by the difficulties that arose on every side. After we had awhile puzzled ourselves without coming any nearer a resolution of those doubts, which perplexed us, it came into my thoughts, that we took a wrong course, and that before we set ourselves upon inquiries of that nature, it was necessary to examine our own abilities, and see what objects our understandings were or were not fitted to deal with. This I proposed to the company, who all readily assented, and thereupon it was agreed, that this should be our first inquiry."

Such were the sentiments on this subject of a man, who has probably contributed more largely than any other individual to help us to the correct understanding of the mind; and whose writings, such is their singular originality and acuteness, can hardly be too strongly recommended for perusal.

§. 7. *Helps us in the correction of mental errors.*

A second advantage resulting from the study of the Philosophy of the Mind, is, that it teaches us in many cases to correct whatever deficiencies or errors may exist in our mental constitution.

In our present state of imperfection, while we are found to experience various kinds of bodily evils, we are not exempt from those of the mind; and we know not, that it can any more excite surprise, that some people exhibit mental distortions, than it can, that we daily see not only the healthy and the well-formed, but the "maimed, the halt, and the blind."

If then it be asked, how are these mental defects, which we observe, to be remedied, the answer is obvious, that we should act in regard to the mind, as we do in promoting the restoration of the body; we should commit the business of ascertaining a remedy to those, who are in some good degree acquainted with the subject and with the nature of the disease. A physician, altogether ignorant of the anatomy and physiology of the human system, would

be poorly qualified to relieve a fellow being in sickness, or who had met with a fracture in his limbs. But if knowledge be necessary, in order to heal the weakness of the body and restore it to its proper soundness and beauty, it is not less important in the restoration of analogous evils in the mental constitution.

In looking round to see, whose minds, are disordered and whose are in a sound and healthy condition, we notice, for example, some persons to be troubled with a very weak memory. We have a very candid confession on this point in the writings of Montaigne. He informs us, that he did not trust to his memory. When he had any commands to execute he always punctually committed them to his memorandum book. "I am forced (says he) to call my servants by the names of their employments, or of the countries, where they were born, for I can hardly remember their proper names; and if I should live long, I question, whether I should remember my own name." It appears, however, from his acquaintance with the principles of the ancient philosophers, that he had not much reason to complain, except of his own inattention to this extremely valuable mental operation. He remembered principles; he could keep in recollection the outlines of the sciences, but could not so well remember insulated facts, especially if they related to the occurrences of common life. This peculiarity in the operations of the memory is not unfrequently found among men of letters, especially if they possess a vivid imagination. But it must be considered a mental defect; one, which it is not only important to understand, but to try to remedy.

Since then it must be admitted, that there are diseases and distortions of the mind no less than of the body, and that we cannot expect a restoration from those evils without an intimate acquaintance with the state and tendencies of our intellectual powers, such an acquaintance becomes exceedingly desirable.

§. 8. *Is the gratification of a reasonable curiosity.*

There is a third recommendation of this study, which will apply to it in common with many others, viz. That it is the gratification of a very reasonable curiosity. The botanist examines the seed of a plant, and its mode of germination, the root and the qualities by which it is fitted to act as an organ of nutrition and support, the structure of the stem, the position of the branches, the form of the leaves, &c.— And it is considered in him a commendable pursuit, and suitable to the inquisitive turn of an intellectual being. Although the declaration of scripture be readily admitted, that the flowers of the field are clothed in brighter raiment than the robes of Solomon, it can never be doubted, that they are a subject of inquiry far inferior to the mind of man, for the same scriptures teach us, that it is for man, considered as an intellectual and immortal being, that all nature lives and blooms. If, therefore, he be worthily employed, who marks the progress of the acorn as it shoots up and spreads itself forth into the strength and fullness of the mountain oak; how much more so is he, who observes the first thoughts of an infant and marks their subsequent history, till he sees them in the proud and overshadowing maturity of the demonstrations of Newton.

§. 9. *Is a help to those who have the charge of early education.*

This study, in the fourth place, furnishes many very valuable hints to those, who have the charge of early education. General experience evinces the truth of an intimation of Mr. Pope, that education gives a direction to the mental character in subsequent life much the same as the inclination of the tree follows the bent of the twig. Children and youth adopt almost implicitly the manners and opinions of those, under whom they happen in Providence to be placed or with whom they much associate, whether they be parents, instructors, or others.

Let it, therefore, be remembered, that passions both good and evil may then rise up and gain strength, which it

will afterwards be found difficult to subdue. Intellectual operations may at that period be guided and invigorated, which, if then neglected, can never be called forth to any effective purpose in after life. Habits and associations of various kinds may then be formed which will follow the subject of them down to the grave, being, as long as life lasts, beyond the power of all attempts at a removal of them.

What we learn from every day's observation agrees with what we are taught in the saying of Solomon; "Train up a child in the way he should go, and when he is old, he will not depart from it."

It is, then, reasonably expected of parents and instructors, that they attempt to eradicate in the minds of the young bad passions and foster and sustain those, which are good; that they pursue suitable methods for the invigoration of the mental powers, and that they strive to strengthen those habits and associations, which shall render them good members of a family, useful citizens in the commonwealth; and above all should those under their care be trained up in the understanding and practice of that religion, which brings peace and hope.

No one certainly can be considered properly qualified for this great undertaking, who has not formed a systematick and philosophick acquaintance with the principles of the mind.

§. 10. *Instructs us not only as to our thoughts but language.*

It may not be out of place to remark here, that this science concerns not only the various forms of thought, but the nature of language also, which is the medium of communication, by which our thoughts are made known to others. Here then is another and fifth benefit, which may properly be set up against those objections, which have been made to this interesting department of science, since it is in a great measure by means of language, that different and distant minds hold intercourse, the forms of society are preserved, and

the great family of man are enabled to go forth in the path of social and civil melioration.

As words are in themselves mere arbitrary signs, and have no natural or inherent fitness for the expression of the signification, which is attached to them, more than various other signs, which might have been employed, they afford a fruitful subject of remark to the intellectual philosopher, who states the object for which they are used, explains their necessary imperfection, and teaches us in their skilful and appropriate application.

§. 11. *Has a connection with moral philosophy, &c.*

It is to be considered further, that this study has an intimate connection with others, which are of great importance; and this connection may be regarded as increasing the urgency of attending to it. It will perhaps be a more satisfactory illustration of this remark than any thing we can say ourselves, if we make a quotation here from Mr. Stewart's review of the philosophical works of Locke and Leibnitz.

"Although my design is to treat separately of metaphysics, ethicks, and politicks, it will be impossible to keep these sciences wholly unmixed in the course of my reflections. They all run into each other by insensible gradations; and they have all been happily united in the comprehensive speculations of some of the most distinguished writers of the eighteenth century. The connection between metaphysics and ethicks is more peculiarly close; the theory of morals having furnished, ever since the time of Cudworth, several of the most abstruse questions, which have been agitated concerning the general principles, both intellectual and active, of the human frame."

Especially, is the knowledge of the principles of Intellectual Philosophy connected with the various departments of criticism. We see not how a person can give any rational account of the effects of a work of imagination without such knowledge, or point out the excellencies and de-

fects of a painting, or sit in judgment upon any other work of art. For, whatever we perceive to be beautiful or sublime in such works, could never possess the qualities of beauty or sublimity independently of our mental frame, and we never apply those epithets to them, except it be with reference to certain principles within us.

But we leave these and all other considerations, tending to show the utility of this science, with a single reflection more, trusting, that it will be enough to justify us in our pursuits.

§. 12. *Teaches us to revere the wisdom of our Creator.*

We are taught by this science to revere the wisdom of our Creator.

We are frequently referred in theological writings to the works of creation, as a proof of his greatness and wisdom; and the remark has been made, not without reason, that the "*stars teach as well as shine.*" The discoveries of modern astronomy not only assure us, that there is a God, but impart this additional assurance, that he is above all others, to whom the attributes of divinity may have been at any time ascribed.

But it must be added, that of all things created, whether in the heavens above or in the earth beneath, the human mind is that principle, which evinces the most wonderful construction, which discloses the most astonishing movements. There is much to excite our admiration in the harmonious movements of the planetary orbs, in the rapidity of light, in the process of vegetation; but still greater cause for it in the principle of thought, in the inexpressible quickness of its operations, in the harmony of its laws, and in the greatness of its researches. How striking are the powers of that intellect, which, although it have a local habitation, is able to look out from the place of its immediate residence, to pursue its researches among those remote worlds, which journey in the vault of heaven, and to converse both with the ages past and to come.

It ought not to be expected that we should be intimate-

ly acquainted with a principle possessing such striking powers, without some reverential feelings towards him, who is the author of it.

§. 13. *Of the mental effort necessary in this study.*

This science demands great mental effort on the part of the student. This effort is of a peculiar kind. It consists essentially in a continued and unbroken fixedness of attention. Such an effort is painful to many, and perhaps this is one cause of the unfavourable reception, which this department of knowledge has often met with. But the advantages attending it are so numerous, it is to be hoped, they will overcome any disinclination to mental exertion. The fruits of the earth are purchased by the sweat of the brow, and it has never been ordered, that the reverse of this shall take place in the matters of knowledge, and that the fruits of science shall be reaped by the hands of idleness. No man has ever become learned without toil; and let it be remembered, if there be many obstacles in the acquisition of any particular science, that he, who overcomes a multiplication of difficulties, deserves greater honour than he, who contends only with a few,

CHAPTER SECOND.

PRIMARY TRUTHS.

§. 14. *Introductory remarks on this subject.*

It is often highly important, in the investigations of a science, to state, at the commencement of such investigations, what things are to be considered as preliminary and taken for granted, and what are not. If this precaution had always been observed, which, where there is any room for mistake or misapprehension, seems so reasona-

ble, how many useless disputes would have been avoided; —the paths to knowledge would have been rendered more direct and easy, instead of being prolonged and perplexed. It is impossible to proceed with inquiries in the science of INTELLECTUAL PHILOSOPHY, as it will be found to be in almost every other, without a proper understanding of those fundamental principles, which are necessarily involved in what follows.

Those preliminary principles, which are necessary to be admitted, and without which we are unable to proceed with any satisfaction and profit in our inquiries, will be called, for the sake of distinction and convenience, PRIMARY TRUTHS.

There would seem to be no impropriety in calling them TRUTHS, since they are forced upon us, as it were, by our very constitution; all mankind admit them in practice, however they may affect to deny them with their lips; and they are as plain and incontrovertible at their very first enunciation, as any discoveries in physicks or any demonstrations in geometry. We call them PRIMARY, because they are the ultimate propositions, into which all reasoning resolves itself, and are necessarily involved and implied in all the investigations, which we shall make on the present subject.

The first of this class of truths, which will come under consideration, is this;

§. 15. *A belief in our personal existence.*

Des Cartes formed the singular resolution, not to believe his own existence, until he could prove it.

He reasoned thus; *Cogito, ergo sum*, I think, therefore, I exist. This argument, which he considered conclusive and incontrovertible, evidently involves what is termed a *petitio principii* or begging of the question.

It is easy to perceive, that the very thing to be proved is assumed. *COGITO* is equivalent to the proposition, *I am a thinking being*; and *ERGO SUM* may be literally interpreted, *therefore, I am in being*. His premises had already im-

plied, that he existed as a thinking being, and it is these very premises, which he employs in proof of his existence. The acuteness, which has generally been attributed to him, evidently failed him in this instance. The argument of Des Cartes was unsuccessful, and no one, who has attempted to prove the same point, has succeeded any better.

It is necessary to take different ground from that taken by this philosopher and his followers. We consider the belief of our existence a PRIMARY TRUTH. A few remarks may tend to show the propriety of thus doing.

There was a time when man did not exist. He had no form, no knowledge. Light, and motion, and matter were things, in which he had no concern. He was created from nothing with such powers and such laws to his powers, as his Creator saw fit to give.

We are called upon to mark the history of this new created being.

At one year of age, or, if it be preferred, before one half or quarter of that period is passed, we will suppose, that some object, external to himself, is, for the first time, presented to his senses. The consequence is, that there is an impression made on the senses, and a perception of the object, presented to them. But it is impossible for him, as I think every one will allow, to perceive the object without a simultaneous conviction of the existence of the percipient. Nothing can be heard, or seen, or touched without an attendant belief, that there is a being, who hears, and handles, and beholds. This is a conclusion, which is necessarily involved in our mental constitution and which, as it has such an origin, neither requires any argument nor fears any refutation.

Malebranche in his search after truth speaks much, if the expressions be admissible, in commendation of the spirit of doubting. But then he bestows this commendation with such limitations as will prevent those evils, which result from too freely giving up to a sceptical spirit.

"To doubt (says he) with judgment and reason, is not so small a thing as people imagine, for here it may be said,

that there's a great difference between doubting and doubting. We doubt through passion and brutality, through blindness and malice, and, lastly, through fancy, and only because we would doubt. But we doubt also with prudence and caution, with wisdom and penetration of mind. Academicks and atheists doubt upon the first grounds, true philosophers on the second. The first is a doubt of darkness, which does not conduct us into the light, but always removes us from it." (B. I. ch. 20.)

We may remark in view of these observations of Malebranche, that such is the doubting of those over-scrupulous inquirers, who demand proof of their own existence. Such scepticism as that is truly a doubt of darkness, which does not conduct us into the light, but always removes us from it.

A second of those truths, which we term PRIMARY, is this ;

§. 16. *A belief of our personal identity.*

The proof of our personal identity is sometimes referred to what is termed consciousness. We are said to be conscious of our identity. When these expressions are used, it is meant by them, that we have a conviction of the understanding, or we *know* ourselves to have enjoyed a continuance of being. If any thing more than this be intended, it will be found to be an use of terms without meaning.

We have employed the phrase, PERSONAL IDENTITY.

The words, *person* and *personal*, convey a complex idea. They have indeed particular reference to that indestructible principle, which we denominate the mind ; but they have reference to it, considered in its connection with the body.

By mental identity we have reference to the continuance and oneness of the thinking principle merely.

By bodily identity we mean the sameness of the bodily shape and general organization. We cannot attach any other meaning to the latter phrase in consequence of the constant changes in the material particles, which compose our systems.

In those apprehensions, however, which we attach to the phrase, PERSONAL IDENTITY, we have reference to both the one and the other, the mind and the body; and combine together the two ideas, which are conveyed in both the phrases before mentioned, viz. mental identity and bodily identity.

A belief in personal identity, or conviction that there has been a continuance of our being, is to be regarded, and with abundant reason, as a primary truth.

The mere fact, that it is implied in our reasonings from the past to the future, and universally in our daily actions, is of itself a sufficient ground for considering it as such, for reckoning it among the original and essential elements of the understanding.

The farmer, who now beholds his well cultivated fields, knows, that he is identically the same person, who twenty years before, entered the forest with an axe on his shoulder, and felled the first tree. The soldier, who recounts by his fireside to his children and grand children the battles of his youth, never once doubts, that he was himself the witness of those sanguinary scenes, which he delights to relate. It is alike useless to attempt to deny or to prove to them what they know, what they believe, not on evidence, but from nature; what they take for granted in their hopes, in their retrospections, in their conversation, in all their engagements.

Another view of the subject may perhaps make the ground, which has been taken, more clear and impressive.

No train of reasoning, (what may be termed an *argument*;) can be brought to bear against this sentiment, that a belief in our personal identity is to be regarded as a primary truth, an original principle of our constitution.

The truth of this remark will appear on examination.

There evidently can be no argument, properly so called, unless there be a succession of distinct propositions. From such a succession of propositions, no conclusion can be drawn by any one, unless he be willing to trust to the evidence of memory. But memory involves a notion of the

time past, and whoever admits, that he has the power of memory, in however small a degree, virtually admits, that he has existed identically the same at some former period, as at present.

The considerations, which we have in view and which are greatly worthy of attention in connection with the principle under examination, may with a little variation of terms be stated thus.

Remembrance, without the admission of our personal identity, is clearly an impossibility. But there can be no process of reasoning without memory. This is evident, because arguments are made up of propositions, which are successive to each other not only in order, but in point of time. It follows, then, that there can be no argument whatever, or on any subject, without the admission of our identity, as a point, from which to start. What then will it avail to attempt to reason either for or against the views, which are here maintained, since in every argument which is employed, there is necessarily an admission of the very thing, which is the subject of inquiry?

A third of those *TRUTHS* or fundamental propositions, which we term primary, may thus be stated;

§. 17. *The external, material world has an existence.*

The Pyrrhonick sect, so named from Pyrrho, its founder, a native of Elea, who flourished in the fourth century before Christ, called in question the truth of every system of opinions, adopted by other sects. Hence they have been also called scepticks and the sceptical sect; names, which, in consequence of holding every thing to be uncertain, they seem to have well merited. They denied among other things the existence of matter. Their reasonings in respect to the material world were such as the following.

FIRST; The organs of perception, said they, are different in different animals, and it is probable, that the same objects present different images or appearances to them. But one person evidently can have no reason for saying, that his perceptions are more agreeable to the real nature

of things than those of another person or of other animals.

SECONDLY; Different objects present a different aspect according to their position, their nearness, or distance, or the mode, in which they are exhibited to the senses; and no good reason can be given, why one of these aspects should agree with the real object any better than the rest of them.

For instance we see a high steeple behind a very large wall or a hill and it appears to be very near and of diminished size, but we afterwards see it with a number of houses and spaces both open and enclosed between; and the steeple, when seen under this difference of circumstances appears differently, seeming to be of a larger size and at a greater distance.

But who can tell, which is the true, the correct representation of the object?

The moon appears to be only a foot or two feet in diameter, when beheld by the naked eye, but the telescope gives a very different account of its dimensions.

In this way, say those, who profess to be genuine scepticks, we are constantly imposed upon, our senses always giving us false representations. We, consequently, know nothing concerning the true nature of material objects. What is termed matter is entirely incomprehensible, and it is altogether an useless undertaking, to attempt to prove the existence of any external substances.

It was said of Pyrrho, that he carried his principles so far as to be in danger of being run over by carriages or of tumbling from precipices. But as his doctrine always found enough disposed to ridicule it, these statements were probably the fabrication of his enemies.

Some have asserted, that the professions of the scepticks are a mere pretence; that they do not believe or rather disbelieve what they profess to; but concerning this it is not essential to inquire, since we have their own explicit account of their opinions, whether it be an account corresponding with the truth or not.

But this is enough to have said concerning the scepticks as a sect.

We should reckon ourselves to be but in a poor calling, if we were to stop, when so many important inquiries demand our attention, and argue at any length the point of the existence of a material world with any, who may be disposed to deny it.

Let them remember, we do not attempt to explain what the real nature of matter is; but only assert, that it exists; no otherwise than when we acknowledge our ignorance of the nature of the existence of God, while we believe, there is such a being.

If the advocates of the doubting philosophy are unable by the sense of sight to judge correctly of the size of a steeple, has not the Almighty furnished them with another sense, that of the touch, by which they can form a more correct estimation?

If the eye of the body by itself alone be unable to give us a correct idea of the sun and moon, cannot the eye of the mind come in to its assistance? Can it not tell us not only the size of those bodies but mark out the path of their motion, and thus not only seeing those things, which actually exist, but those, which are to be hereafter, predict their position and appearance before that position and those appearances happen?

This also is to be considered.

These persons either deny or admit their own existence. If they deny it, then we have none to contend with. If they admit it, then it remains to be shown by them, how the declaration of Scripture, *that all flesh is grass*, does not hold true in respect to themselves, or that their bodies more truly exist now, than they will, when they shall have mingled with the dust, or have passed into other material shapes.

Furthermore, whatever may be the idea of scepticks on this point, the great mass of mankind believe in the existence of the Deity; a being of perfect truth as well as benevolence. But to create man so that he should be irresistibly led to believe in the existence of a material world, when it did not exist, to create him with high capacities of thought, of feeling, and of action; and then to

surround him with a panorama of illusive and imaginary appearances, would seem to be beneath both truth and goodness.

Admitting, therefore, the existence of the material world without further remarks on the subject, we come to a **FOURTH PRIMARY TRUTH**, which will be found to enter very extensively into all our investigations concerning the mind.

§. 18. *Confidence is to be reposed in the memory.*

When we say, that confidence is to be reposed in the memory, it is not meant to be asserted, that we are liable to no mistakes from that source. It is merely meant, that when we are satisfied, that our memory fully and correctly retains any perceptions of whatever kind of a former period, we receive such remembrances with as much confidence and act upon them as readily, as if the original perceptions were now present to the mind. Without this confidence in the memory we could hardly sustain an existence ; we certainly could not derive any thing in aid of that existence from the experience of the past.

Our past life has been a series of sensations or of different states of the mind, following each other in rapid and almost unbroken succession.

But if we are asked in what way we are able to connect the past states of the mind with the present, and to make our former sensations a part of the sum of our knowledge now ; all the answer, which can be given to these inquiries, is, that, in the original designation of those principles, which were selected for the composition of our intellectual being, we are so constituted as to place a perfect reliance on the reports of that mental operation, which we term the memory ; and this statement is equally satisfactory and the only satisfactory account, whether we consider the memory a simple or a complex exercise of the mind.

There is one more of those principles, which are justly considered primary and original, to be mentioned. It is this.

§. 19. *Man is so constituted, as to be susceptible of a variety of emotions.*

This characteristick in our constitution will be the better understood by being briefly illustrated.

We behold certain appearances in the external, material world ; for instance, a sloping hill, fields waving with verdure, with the accompaniments of brooks and forest. This combination of natural scenery is presented before the mind ; and this presentation of it to the intellectual principle is immediately succeeded by an **EMOTION OF BEAUTY**.

We are subsequently removed from this pleasing combination of natural scenery to the brow of some rugged precipice. Beneath us are giant oaks, which toss their hundred arms, and desert caves, from whose mysterious bosoms the hollow winds sigh responsive to the more awful voice of the torrent. When such a combination of the works of nature is held up to the soul's inspection, it is immediately followed, as in the case already mentioned, by an emotion ; and we term it, by way of distinction from other, states of the mind, an **EMOTION OF SUBLIMITY**.

Other emotions are excited, when different combinations of natural objects are beheld, which will vary also with differences in the situation and circumstances of the beholder.

But this is a principle, which extends in its application not only to those inanimate works, by which we are surrounded, but to human actions also.

Any actions of our fellow beings, when beheld by us, are immediately connected in the mind with certain emotions, which exist in consequence of the previous existence of those actions. Those actions, which discover justice, beneficence, and propriety, are in general followed by pleasure and approbation. Other actions of an opposite character are attended with pain and disapprobation.

Hence it may be laid down as a principle of our mental constitution, that certain emotions follow the exhibition of objects or actions to the mind, much the same as vision follows the opening of the eyelids, or that sounds

will be produced, when the vibrations of the air reach the organ of hearing.

No reason whatever can be given, why any combination of objects or of actions, why any exhibition of purpose or of power, causes a new state of mind of that class termed emotions any more, than actions and objects, purposes and powers utterly unknown to us, except it be this, that a susceptibility of emotions is one of the constituent and original characteristics of the intellectual principle.

With these admitted principles in view, which seem to spring up before us from our very nature and to claim our undoubting assent, the philosophy of the mind at once assumes an interest, which it could not otherwise possess. It ceases, at least in a great measure, to be charged with that vagueness, and uncertainty, and spirit of trifling, which have hitherto been brought against it.

§. 20. *Admission of preliminary truths agreeable to right feelings towards the Supreme Being.*

When we consider, how short-sighted we are, it was to be expected, that we should find ourselves in the onset, under the necessity of taking certain principles for granted, as the conditions and auxiliaries of our subsequent inquiries.

If we are under the necessity of taking for granted these preliminary or primary truths, which have been mentioned, in all our investigations, which, we have seen to be the case, we may well say, that we find them agreeable to fact; and we ought, therefore, to find the fact accordant with our feelings, and not to complain of it.

Not to be satisfied with such views and such admissions, when we puzzle ourselves in vain to get rid of them, may justly be thought to indicate an unhappy perversity in the moral disposition, and is a sort of complaint against God himself. To undertake to explain every thing, independently of the creating power, and without a careful regard to those ultimate principles, which that creating power has ordained, betrays at least an ignorance of our limit-

ed ability, and, if it should not impeach one's piety, is an indication of weakness. If to know what our Creator has done be the part of philosophy, to acknowledge and revere him in his doings seems to be the part of religion ; and he, who is not in some degree possessed of the latter, wants that state of mind, which would be an essential aid to him in the investigations of the former. Since it is true, wherever we go, wherever we push our inquiries, whether in regard to mind or matter, we find, in the result of those inquiries, Him, who has given to us whatever capacity of knowledge we may possess, saying to men, as he does to the expanse of the ocean, "*there shall thy proud waves be stayd.*"

CHAPTER THIRD.

PERCEPTION.

§. 21. *On classifications of our intellectual powers.*

It is a matter of convenience and helps to the more ready understanding and recollection of these subjects, to class together and to assign a name to certain intellectual operations or to combinations of them of the same kind. To certain operations of the mind of one sort we give the name, PERCEPTION ; while operations of another kind, differing from perception and also from each other, are designated by the terms, memory, imagination, &c.

But it is not necessary to our purpose to attempt any classification more general than this, what may be termed a partitioning of the states or affections of the mind, as, for instance, in the old division of the understanding and will.

The classification of certain operations of the same sort under the names, PERCEPTION, MEMORY, IMAGINATION, &c. is only a subordinate division ; one which, if it be not clearly made, is at least suggested, by nature ; and is very

different from that of assigning a distinctive, general name to a number of operations, essentially differing from each other, with the intention of having them considered an entirely separate fraternity. Some remarks further may be made to justify us in not attempting those more general classifications, which have been formerly proposed.

§. 22. *Of the classification into understanding and will.*

The operations of the mind have formerly been divided and classed under the two general names of the understanding and will.

Under the will seems to have been included that ability, in whatever way it might exhibit itself, which was supposed to be necessary in bringing the mental constitution to action; it was the mind's operative and controlling principle; something which moved and governed it. Agreeably, then, to this division, we find, on the one hand, the will, and, on the other, as its opposite, was the understanding. To determine, however, what operations belonged to the one and what belonged to the other, was by no means a matter well settled, but of great contention; and a zeal in this particular was exhibited similar to that, when rival powers strive for the annexation of a disputed province to their respective empires. But of what benefit was this general classification it is now difficult to say, and it has at last fallen into comparative discredit.

§. 23. *Of the classification into active and intellectual powers.*

Another general classification of the powers of the mind was this, into the intellectual and the active powers.

Under the intellectual, were comprehended perception, memory, judgment, reasoning, abstraction, &c.; under the active powers, volition, and a variety of emotions, such as pleasure, pain, aversion. This classification, excepting the difference of names, was very similar to the one above mentioned. But, very evidently, positive or active power must be implied in some of the operations termed intellectual,

as well as in those, to which the opposite designation is given. That state of the mind, which is termed abstraction, or imagination, is as positively active as that, which chooses, or loves, or hates.

Without, therefore, attempting a general classification of the mental powers, it will be sufficient to remark upon them separately, beginning with PERCEPTION.

And here it may be observed, that our principal object is to ascertain facts in regard to the mind ; the arrangement of those facts and any speculations, which are not founded directly upon them, are points of subordinate consideration.

§. 24. *Of the objects of perception.*

All things, with which we become acquainted by means of the senses, are objects of perception. External nature, in particular, in all its varieties is submitted to our inspection; and whatever knowledge we are enabled to possess of it we enjoy by means of that mental operation. In all our knowledge then from this source, two things are to be taken for granted,

- (1) The existence of a material world,
- (2) Certain affections, caused in the organs of sense by external things.

Nor do we anticipate, after what has already been said on the subject of a material world, taken in connection with our consciousness of a susceptibility in our organs of sense of impressions from external objects, that any exception will be taken to these reasonable assumptions.

Perception, then, or external sensation is a state or affection of the mind, which is immediately successive to certain affections of the organs of sense, these affections in the sensorial part being caused by external objects.

The qualities or properties of the material world, which is the great object of our perceptions, are considered by Mr. Locke and others under the two heads of Primary and Secondary.

§. 25. *Of the primary qualities of bodies.*

The primary qualities of bodies are extension, figure, divisibility, and solidity. The name of secondary qualities has been given to sound, colour, taste, smell, heat, and cold.

Primary qualities are known by being essential to the existence of all bodies. All bodies have extension, all bodies have figure, all are capable of division, all are solid.

By solidity in bodies is to be understood that quality, by which a body hinders the approach of others, between which it is interposed. In this sense water and all other fluids are solid. If particles of water could be prevented from separating, it would be impossible for any two bodies, between which they might be, to come in contact. This was shown in an experiment, which was once made at Florence. A quantity of water was enclosed in a gold ball, which on the most violent pressure could not be made to fill the internal cavity, until the water inside was forced through the pores.

Divisibility is reckoned among the primary qualities of matter. The smallest particle is susceptible of division; and to that small particle must belong not only divisibility but the qualities of solidity, figure, and extension.

§. 26. *Of the sense of smell.*

The medium, through which we receive the sensations of smell, is the organ, which is termed the olfactory nerve, situated principally in the nostrils, but partly in some continuous cavities. When any odoriferous particles, sent from external objects, affect this organ, there is a certain state of mind produced, which varies with the nature of the odoriferous bodies. But we cannot infer from the sensation itself merely, that there exists any necessary connection between the smell and the external objects any more, than that there exists a connection between these motions of joy and sorrow and the same objects. It might indeed be suggested to us by the change in our mental states, that there must be some cause or antecedent to the change, but

this suggestion would be far from implying the necessity of a *corporeal* cause.

How then does it happen, that we are not merely sensible of the particular sensation, but refer it at once to some external object, to the rose, or the honeysuckle? In answer it may be remarked, if we had always been destitute of the senses of sight and touch, this reference never could have been made, but having been furnished with them by the beneficent author of our being, we make this reference by experience. When we have seen the rose, when we have been near to it and handled it, we have uniformly been conscious of that state of mind, which we term a sensation of smell. It is only when we have been in the field of honeysuckles or in its immediate neighbourhood, or when they have been gathered and presented to us, that we have been reminded of their fragrance. And thus, having learnt by experience, that the presence of the odoriferous body, is always attended with the sensations of smell, we form the habit of attributing the sensations to that body as their cause; and this mental reference is made with almost as much promptness, as if it were necessarily involved in the sensation or perception itself.

§. 27. *Of the sense of taste.*

A sapid body is applied to the organ of taste. The application of such body immediately causes a change or affection of the sensorial organ; and this is at once followed by a mental perception. Thus we have the perceptions, to which we give the names, sweet, bitter, sour, acrid, &c.

The perceptions of the mind are referred by us to something, external to itself, which we call bitter, sweet, &c. as their *cause*. This reference is made very rapidly, so that we at once say of one apple it is sweet, and of another, it is sour; but it will always be found to be subsequent, in point of time, to the perception. As in the case of smells, which have been already remarked upon, the reference is the result of our former experience. We say of one body, it is sweet, and of another, it is acrid, because we have ever

observed, that the mental states, indicated by those terms, have always existed in connection with the presence of those bodies.

Whenever, therefore, we say of any bodies, that they are sweet, bitter, acrid, or, apply any other epithets, expressive of sapid qualities, we mean to be understood to say, that such bodies are fitted in the constitution of things to cause in the mind the perceptions of sweetness, bitterness and acridness, or other sensations, expressed by denominations of taste. Or, in other words, that they are the established antecedents of such sensations, as there is, further than this, no necessary connection between them.

§. 28. *Of the sense of hearing and of sounds.*

Sounds, which we perceive by means of the sense of hearing, are caused by undulations of elastick air, set in motion by the sonorous body and striking on the tympanum of the ear.

Sounds differ, first, in the tone; secondly, in the strength of the tone. It is remarked by Dr, Reid, that five hundred variations of tone may be perceived by the ear, also an equal number of variations in the strength of the tone; making, by a combination of the tones and of the degrees of strength, twenty thousand simple sounds, differing either in tone or strength.

In a perfect tone a great many undulations of elastick air are required, which must be of equal duration and extent, and follow each other with perfect regularity. Each undulation is made up of the advance and retreat of innumerable particles of elastick air, whose motions are all uniform in direction, force, and time. Accordingly, there will be varieties in the same tone, arising from the position and manner of striking the sonorous body, from the constitution of the elastick medium, and from the state of the organ of hearing.

Different instruments, such as a flute, a violin, and a bass-viol may all sound the same tone, and yet be easily distinguishable. A considerable number of human voices

may sound the same note, and with equal strength, and yet there will be some difference. The same voice, while it maintains the proper distinctions of sound, may yet be varied many ways by sickness or health, youth or age, and other alterations in our bodily condition, to which we are incident.

§. 29. *Manner in which we learn the place of sounds.*

Previous to all experience, we should not know, whether a sound came from the right or left, from above or below, from a smaller or greater distance.

Dr. Reid mentions, that once, as he was lying abed, having been put into a fright, he heard his own heart beat. He took it to be some one knocking at the door, and arose, and opened the door oftener than once before he discovered, that the sound was in his own breast. Some traveller has related, that when he first heard the roaring of a lion in a desert wilderness, not seeing the animal, he did not know on what side to apprehend danger, as the sound seemed to him to proceed from the ground, and to enclose a circle, of which he and his companions stood in the centre.

It is by custom or experience, that we learn to distinguish the place of things, and, in some measure also, their nature, by means of their sound. It is thus that we learn, that one noise is in a contiguous room, that another is above our heads, and another in the street. And what seems to be an evidence of this is, that when we are in a strange place, after all our experience, we very frequently find ourselves mistaken in these respects.

If a man born deaf were suddenly made to hear, he would probably consider his first perceptions of sound as originating wholly within himself. But in process of time we learn not only to refer the origin of sounds to a position above or below, to the right or left; but to connect each particular sound with a particular external cause, referring one to a bell as its appropriate external cause, another to a flute, another to a trumpet.

§. 30. *Connection of hearing with language.*

One of the greatest benefits of the sense of hearing is, that, in consequence of it, we are enabled to hold intercourse with each other by means of language, without which the advancement of the human mind must have inevitably been very limited.

It is by language, that we express our feelings to the little company of our neighbours and our own family; and without it this pleasant and cheering intercourse must be almost entirely suspended. Not limited in its beneficial results to families and neighbourhoods, it is the medium of the transmission of thought from age to age, from generation to generation. So that in one age is concentrated the result of all the researches, the combination of the wisdom of all the preceding.

"There is without all doubt," it has been observed, "a chain of the thoughts of human kind, from the origin of the world down to the moment at which we exist,—a chain not less universal than that of the generation of every being, that lives. Ages have exerted their influence on ages; nations on nations; truths on errors; errors on truths."

Whether language be an invention of man, or a power bestowed upon him by his Creator and coeval with the human race, the ear must in either case have been the primary recipient;—the faculty of speech so necessary and so beneficial could not have existed without the sense of hearing.

§. 31. *Of the sense of touch.*

The principal organ of touch is the hand. This part of our frame is composed of various articulations, that by the aid of the muscles are easily moveable, so that it can adapt itself readily to the various changes of form in the objects, to which it is applied.

The senses, which have been already mentioned, are more simple and uniform in their results, than that of the touch. By the ear we have a perception of sounds or that

sensation, which we denominate hearing. By the palate we have a knowledge of tastes, and by the sense of smelling we become acquainted with the odours of bodies. The knowledge, which is directly acquired by all these senses, is limited to the qualities, which have been mentioned. By the sense of touch, on the contrary, we become acquainted not with one merely, but with a variety of qualities, such as the following, heat and cold, hardness and softness, roughness and smoothness, figure, solidity, motion, and extension.

Some might be inclined to say, that hardness and softness are expressive only of greater or less resistance, and are, therefore, the same thing, differing only in degree; but the consideration of these ideas separately does not properly come in here. In the remarks, which are hereafter to be made on the origin of knowledge, it will come within the plan of these Elements to bestow on some of them a more particular inquiry.

§. 32. *Of the benefits of the sense of sight.*

Of those instruments of perception, with which a benevolent Providence has furnished us, of high rank must be given to the sense of seeing. If we were restricted in the process of acquiring knowledge to the informations of the touch merely, how many embarrassments would attend our progress and how slow it would prove! Having never possessed sight, it would be many years, before the most acute and active person could form an idea of a mountain or even of a large edifice. But by the additional help of the sense of seeing, he not only observes the figure of large buildings, but is in a moment possessed of all the beauties of a wide and variegated landscape.

It does not fall within our plan to give a minute description of the eye, which belongs rather to the anatomist, but such a description, with a statement of the uses of the different parts of the organ, must be to a candid and reflecting mind a most powerful argument in proof of the existence and goodness of the Supreme Being. How won-

derful among other things is the adaptation of the rays of light to the eye ! If those minute particles, which come to us with such inconceivable rapidity from all things around us, were not coloured, we should be deprived of much of that high satisfaction, which we now take, in beholding surrounding objects ; and if they were not of a texture so extremely small, they would cause much pain to the organ of vision.

§. 33. *Statement of the mode or process in visual perception.*

In the process of vision, the rays of light, coming from various objects and in various directions, strike in the first place on the pellucid part of the ball of the eye.

If they were to continue passing on precisely in the same direction, they would produce merely one mingled and indistinct expanse of colour.

In the progress through the chrySTALLINE humour, they are refracted or bent from their former direction and distributed to certain focal points, on the retina, which is a white, fibrous expansion of the optick nerve.

The rays of light, coming from objects in the field of vision, whether it be more or less extensive, as soon as they have been distributed on their distinct portions of the retina, and have formed an image there, are immediately followed by the sensation or perception, which is termed sight.

The image, which is pictured on the retina, is the last step, which we are able to designate in the material part of the process in visual perception ; the mental state follows, but it is not in our power to trace, even in the smallest degree, any physical connection between the optical image and the corresponding state of the mind.

All that we can say in this case is, that we suppose them to hold to each other the relation of antecedent and consequent by an ultimate law of our constitution.

NOTE. *On certain terms used as synonymous.*

The words, affection, idea, thought, sensation, operation, and perception are in common use indiscriminately applied to the mind, although some of them not exclusively so; and when thus applied, appear to be used as *synonymous*, and as signifying merely a state or position of the thinking principle. It seems, therefore, to be useless to set up an arbitrary distinction between them, which the common speech, both in conversation and in writing, will be continually annulling; and which distinction, in the present almost indiscriminate application of the words, might tend rather to perplex than aid us in our inquiries. Besides; nice inquiries into distinctions in the meaning of words belong rather to treatises purely philological than the present elementary work, which, taking language as it is, without pretending to define and settle its application, professes merely to collect for the use of the student, in a concise and plain view, some prominent facts in respect to the mind. Provided the facts are conveyed in an intelligible manner, so that the student can fully understand them, our object will be answered.

§. 34. *Of the connection which the brain has with perception.*

It was an odd opinion, which once widely prevailed, that our ideas are inscribed in marks or traces in the medullary substance of the brain. "So soon as the soul (says Malebranche in his Search after Truth) receives some new ideas, it imprints new traces in the brain, and so soon as the objects produce new traces, the soul receives new ideas."

This leads us to observe, without taking up time in remarking on this now exploded opinion, that the brain is a prominent organ in the material part of the process of sensation or of external perception. The sensorial substance, as it exists in the nerves, excepting the coat, in which it is enveloped, is the same as in the brain, being of the same

soft and partially fibrous texture and in perfect continuity with it. When the brain is in an unsound state, or has been in any way injured, both the external impression and the consequent perception are very imperfect. Also if the nerve, which is a supposed continuation of the brain, be injured, or if its continuity be disturbed by the pressure of a tight ligature, the effect is the same; both the external impression and the perception are either destroyed or are imperfect.

The brain, therefore, and the nerves in continuity with it constitute the *sensorial organ*, which in the subordinate organs of taste, of smell, of sight, of touch, and of hearing, presents itself under different modifications to external objects. On this organ, the *sensorial*, as thus explained, an impression must be made, before there can be perception.

An impression, for instance, is made on that part of the sensorial organ called the auditory nerve, and a state of mind immediately succeeds, which is termed the perception of sound.

An impression is made by the rays of light on that expansion of the optick nerve, which forms what is termed the *RETINA*, and the intellectual principle is immediately brought into that new position, which is termed visual perception.

The hand is impressed on a body of an uneven and rough surface, and immediately consequent on this impression, is that state of mind, which is termed a sensation or perception of roughness.

§. 35. *Impressions on the senses and perceptions are antecedents and consequents.*

In all these cases, as we have already remarked in respect to sight in particular, the impression made on the organ of sense is the antecedent, the mental perception is the consequent, and we are utterly unable, further than the mere fact of precedence and sequence, to trace any connection between them. But while we can see in instances of this description no necessary, no physical connection

between the perception of the mind and the impression on the senses, we clearly discover the agency of the Supreme Being, who has appointed and sustains this connection, which is in itself arbitrary and conventional.

We do indeed speak of cause and effect as if we could perceive how one follows another, but there is no other cause and effect in the physical world, than that of antecedent and consequent; and the instances, which we thus name, are to be resolved into the independent and uncontrolled power of God;—that Being, who, in the language of inspiration, “brings forth Mazzaroth in his season, and guides Arcturus with his sons.”

This discovery of the presence of the Almighty, to bind together and to give efficacy to things, which in themselves have no necessary connection, ought to be attended with a religious impression. It ought, on the one hand, to remind us of our own limited powers, and, on the other, of the unsearchable knowledge, and power, and beneficence of our Creator. It was his hand, which (to use an illustration of Akenside) attuned the mind to the impressions of external things, so that it returns to them a corresponding note, like the image of Memnon, which was said in the fables of antiquity, whenever the morning sunbeams touched it, to pour forth its musick along the banks of the Nile.

§. 36. *Of the estimation of distances by sight.*

By the distance of objects, when we use the term in reference to ourselves, we mean the space, which is interposed between those objects and our own position. Blind men have a notion of distance and can measure it by touch or by walking forward, until they meet the distant object.

The perception of distance by the sight is an acquired and not an original perception.

All objects in the first instance appear to touch the eye.

Our experience has corrected so many of the representations of the senses before the period, which we are yet

able to retrace by the memory, that we cannot prove this by a reference to our own childhood and infancy. It appears, however, from the statement of the cases of persons born blind on the sudden restoration of their sight.

"When he first saw, (says Cheselden, the anatomist, when giving an account of a young man, whom he had restored to sight by couching for the cataract,) he was so far from making any judgment about distances, that he thought all objects touched his eyes, as he expressed it, as what he felt, did his skin; and thought no objects so agreeable as those, which were smooth and regular, although he could form no judgment of their shape, or guess what it was in any object, that was pleasing to him."

This anatomist has further informed us, that he has brought to sight several others, who had no remembrance of ever having seen; and that they all gave the same account of their learning to see, as they called it, as the young man already mentioned, although not in so many particulars; and that they all had this in common, that having never had occasion to move their eyes, they knew not how to do it, and, at first, could not at all direct them to a particular object; but in time they acquired that faculty, though by slow degrees.

Blind persons, when at first restored to sight, are unable to estimate the distance of objects by that sense, but soon observing, that certain changes in the visible appearance of bodies always accompany a change of distance, they fall upon a method of estimating distances by the visible appearance. And it would no doubt be found, if it could be particularly examined into, that all mankind come to possess the power of estimating the distances of objects by sight in the same way. When a body is removed from us and placed at a considerable distance, it becomes smaller in its visible appearance, its colours are less lively, and its outlines less distinct; and we may expect to find a number of intermediate objects, more or fewer, as the distance may happen to be, showing themselves between the receding object and the spectator. And hence it is, that a certain

visible appearance comes to be the sign of a certain distance.

Historical and landscape painters are enabled to turn these facts to great account in their delineations. By means of dimness of colour, indistinctness of outline, and the partial interposition of other objects, they are enabled apparently to throw back at a very considerable distance from the eye those objects, which they wish to appear remote. While other objects, that are intended to appear near, are painted vivid in colour, large in size, distinct in outline, and separated from the eye of the spectator by few or no intermediate objects.

§. 37. *Further illustrations of this subject.*

A vessel seen at sea by one, who is not accustomed to the ocean, appears much nearer, than it actually is. In his previous observations of objects at a distance he has commonly noticed a number of intermediate objects, interposed between the distant body and himself. The absence of those intermediate objects causes the deception, under which he labours in the present instance; or is, at least, a *prominent* cause of his erroneous supposition, that the vessel is nearer than it truly is.

For the same reason people misjudge of the width of a river, estimating its width at a half or three quarters of a mile at the most, when it is perhaps not less than double that distance.

The same in estimating by the eye the width and length of plains and marshes.

We mistake in the same way also in estimating the height of steeples and other similar elevated bodies. As the upper parts of the steeple out-top the surrounding buildings and there are no contiguous objects with which to compare it, any measurement taken by the eye must be inaccurate, but is generally less than the truth.

A man on the top of a steeple seems smaller to those below, than the same man would seem to the same persons, and at the same distance on level ground. As we have

been in the habit of measuring distances on the ground by the eye, we can give a pretty near guess, whether a person be at an hundred feet distance, or more or less; and the mind immediately makes an allowance and corrects, so rapidly that we do not remember it, the first visual representation. But having never been in the habit of measuring perpendicular distances, the mind is at a loss, and fails to make that correction, which it would very readily, and, as it were, intuitively make in the case of any objects on level ground. So that a man an hundred feet in the air appears to us smaller, than at the same removal from us on the earth.

The fixed stars when viewed by the eye, all appear to be alike indefinitely and equally distant. Being scattered over the whole sky, they make every part of it seem like themselves at an indefinite and equal distance, and, therefore, give the whole sky the appearance of the inside of a sphere. Moreover, the horizon seems to the eye to be further off than the zenith; because between us and the former there lie many things, as fields, hills, waters, which we know to occupy a great space; whereas between us and the zenith there are no considerable things of known dimensions. And, therefore, the heavens appear like the segment of a sphere, and less than a hemisphere, in the centre of which we seem to stand. And the wider our prospect is, the greater will the sphere appear to be and the less the segment.

In connection with what has been said we are led to make this further remark, that a change in the purity of the air will perplex in some measure those ideas of distance, which we receive from sight. Bishop Berkely remarks while travelling in Italy and Sicily, he noticed, that cities and palaces, seen at a great distance, appeared nearer to him by several miles than they actually were. The cause of this he very correctly supposed to be the purity of the Italian and Sicilian air, which gave to objects at a distance a degree of brightness and distinctness, which in the less clear and pure atmosphere of his native country, could be

observed only in those towns and separate edifices, which were near. At home he had learnt to estimate the distance of objects by their appearance ; but his conclusions failed him, when they came to be applied to objects in countries, where the air was so much clearer.

§. 38. *Idea of extension not originally from sight.*

We have seen, that our idea of distance is not derived originally from the sight, but from the touch. Our idea of extension has the same origin ; for, as distance is the space interposed between one object and another, extension is the distance between the parts of the same object where in the intermediate parts there is a continuity of the same substance.

If a man, endued with sight, were to be fixed all his days in one place immoveably, and were deprived of the means of gaining any experience by the touch, that man could never, from the information of his own senses, receive any accurate knowledge of extension. But having learnt in time what appearance coloured and extended bodies make to the eye, he comes to learn from that appearance the extension of bodies, much the same as he estimates their distance from their appearance.

And this statement leads us to the consideration of *magnitude* or limited extension, which is also estimated by the eye, although the power of thus measuring it, like that of measuring distances and extension, is not an original perception, but is acquired by the aid of the touch.

§. 39. *Measurements of magnitude by the eye.*

Magnitude is divided into two kinds, tangible and visible ; the tangible magnitude being always the same, but the visible, varying with the distance of the object. A man of six feet stature is always that height, whether he be a mile distant, or half a mile, or near at hand ; the change of place making no change in his real or tangible magnitude. But the visible magnitude of this man may be six feet or not one foot, as we view him present with us, or at two

miles distance; for his magnitude appears to our eye greater or less, according as he is more or less removed.

Of two objects equally distant or supposed to be equally distant, that, which has the greatest visible magnitude, is supposed to have the greatest tangible magnitude.

To a man bewildered in a mist, objects seem larger than the life, because their faint appearance conveys the idea of great distance, and an object at a considerable distance, which has the same visible magnitude with one near, the mind immediately concludes to be larger.

The sun and moon seem larger in the horizon than in the meridian, appearing then to be at the greatest distance, either because the horizon for a reason already given seems more remote than the zenith, or because the atmosphere, being more full of vapour towards the horizon, makes the heavenly bodies appear fainter, and consequently more distant.

§. 40. *Of the knowledge of the figure of bodies by the sight.*

A solid body presents to the eye nothing but a certain disposition of colours and light. We may imagine ourselves to see the prominencies or cavities in such bodies, when in truth we see only the light or the shade, occasioned by them. This light and shade, however, we learn by experience to consider as the sign of a certain, solid figure.

A proof of the truth of this statement is, that a painter by carefully imitating the distribution of light and shade, which he sees in objects, will make his work very naturally and exactly represent, not only the general outline of a body, but its prominencies, depressions, and other irregularities. And yet his delineation, which by the distribution of light and shade gives such various representations, is on a smooth and plain surface.

It was a problem submitted by Mr. Molyneux to Mr. Locke, whether a blind man, who has learnt the difference between a cube and a sphere by the touch, can, on being suddenly restored to sight, distinguish between them, and

tell, which is the sphere and which is the cube, by the aid of what may be called his *new* sense merely? And the answer of Mr. Locke is, that he cannot. The blind man knows what impressions the cube and sphere make on the organ of *touch*, and by that sense is able to distinguish between them, but, as he is ignorant what impression they will make on the organ of *sight*, he is not able by the latter sense alone to tell, which is the round body, and which is the cubick.

It was remarked, that solid bodies present to the eye nothing but a certain disposition of light and colours.

It seems to follow from this, that the first idea, which will be conveyed to the mind on seeing a globe, will be that of a circle, variously shadowed with different degrees of light. This imperfect idea is corrected in this way. Combining the suggestions of the sense of touch with those of sight, we learn by greater experience what kind of appearance solid, convex bodies will make to us. That appearance becomes to the mind the sign of the presence of a globe; so that we have an idea of a round body by a very rapid mental correction, whereas the idea first conveyed to the mind is truly that of a plane, circular surface, on which there is a variety in the dispositions of light and shade. It is an evidence of the correctness of this statement, that in paintings plane surfaces, variously shaded, represent convex bodies, and with great truth and exactness.

It appears then, that distance, extension, magnitude, and figure, are originally perceived, not by sight, but by touch. We do not judge of them by sight, until we have learnt by our experience, that certain visible appearances always accompany and signify certain distances, extensions, magnitudes, and figures. This knowledge we acquire at a very early period in life, so much so, that we lose in a great measure the memory both of its commencement and progress.

And yet many people can recollect the time, when they considered the sky to be a transparent and solid concave,

resting on the tops of distant mountains. How different is this idea, which we receive from the sight, from what we find in our subsequent experience to be the fact!

§. 41. *The senses reciprocally assist each other.*

The errors and deficiencies of one sense are made up and corrected by the friendly presence and suggestions of another. And when any of the senses entirely fail, the others are proportionably quickened and improved.

A multitude of instances go to show to what extent this correction and this aid take place.

We will suppose, as an illustration, that, at an early period of life, a person loses his sight. An effect on the sense of hearing and of touch is immediately perceived; they are greatly improved.

The blind man cannot see his friend, but he knows, when he enters the room by the sound of his tread. He cannot see the large and heavy bodies, which happen in his way when he walks about, but he suspects their too great nearness to him in consequence of the increased resistance of the atmosphere.* And a blind person, owing to the increased accuracy of the remaining senses, would be better trusted to go through the various apartments of a house, in the darkness of midnight, than one, possessed of

* It is a singular circumstance, that something similar to what is here stated of the ability of blindmen to discover the nearness or distance of objects by changes in the resistance of the atmosphere, has been noticed by the naturalist, Spallanzani, in respect to bats. He discovered, that bats when perfectly blinded and afterwards set at liberty, had the extraordinary faculty of guiding themselves through the most complicated windings of subterraneous passages, without striking against the walls, and that they avoided with great skill cords, branches of trees, and other obstacles, placed by design in their way.

This ability is probably owing to an extreme delicacy in the wing, which is of a very large size in proportion to that of the animal, and is covered with an exceedingly fine net-work of nerves. The bat, as it strikes the air with its wing, receives sensations of heat, cold, and resistance, and, in consequence, is enabled to avoid objects, which would otherwise obstruct its flight, apparently in the same way that blind persons perceive a door or a wall by a change in the temperature or in the resistance of the air.

the sense of seeing, but without any artificial light to assist him. It is stated on the authority of a Roman historian, that there was a blind man, who made it his employment to conduct merchants and other travellers through the sands and deserts of Arabia. This statement seems not to be improbable, when we recollect what is related in the transactions of the Manchester Society in England of John Metcalf, otherwise called Blind Jack. He became blind at an early period; but, notwithstanding, followed the profession of a waggoner and occasionally of a guide in intricate roads, during the night, or when the tracks were covered with snow. At length he became a projector and surveyor of highways in difficult and mountainous districts; an employment, for which one would naturally suppose a blind man to be but indifferently qualified. But he was found to answer all the expectations of his employers, and most of the roads over the peak in Derbyshire in England were altered by his directions. Says the person, who gives this account of Blind Jack, "I have several times met this man with the assistance only of a long staff traversing the roads, ascending precipices, exploring vallies, and investigating their several extents, forms, and situations, so as to answer his designs in the best manner." (Ed. Ency. Art. Blindness.)

This improvement of the remaining senses, when one of them is lost, is probably owing to the increased attention, which people then bestow upon the various and nicely distinguished suggestions, which they furnish. Nothing escapes them, and those dim perceptions, which were formerly almost unnoticed, now convey to them important information.

§. 42. *Remarks on certain writers on our visual perceptions.*

It is proper to premise, before speaking of writers on the subject of our visual perceptions, that whatever remarks we may at any time make of a critical and historical nature

will in general be brief; our object being chiefly to let the student know, to whom he is indebted for new views in this science, and to offer what assistance we may be able to, in helping him to a selection of those books on the mind, which are most worthy of his attention.

It does not appear, that there were just and well settled views on the subject of our visual perceptions before the time of Dr. Barrow, who flourished about the middle of the seventeenth century, well known for his theological, and especially for his mathematical writings. We do not, however, mention his name, because he was in any great degree a contributor to the philosophy of the mind, although he has some merit in this respect; but from the circumstance that, in the conclusion of his Optical Lectures, he alludes to the subject of our visual perceptions in such a way as to let us know what perplexity rested upon it so late as at that period.

There are some facts in relation to the perception of the distance of external objects, which he acknowledges are involved in the mysteries of nature, and will probably not be discovered, until the manner of vision shall be more perfectly known. He says, he, therefore, leaves the knot untied.

At a later period, Mr. Molyneux and Mr. Locke evidently had views on this subject closely approximating to what is now considered the true explanation of these phenomena, as may be inferred in particular from some remarks concerning them, which are made in the second Book of the Essay on the Understanding.

But it is only justice to a learned and ingenious man to remark here, that the statement of our visual perceptions, as above given in the sections on that subject, was first fully proposed and established by Dr. Berkeley, bishop of Cloyne. Notwithstanding the great deduction, which he has incurred, in consequence of his peculiar views in respect to the existence of a material world, his writings, it must be confessed, exhibit much acuteness of thought, and what is no small merit, are written in a

simple and perspicuous style, well adapted to philosophical subjects.

Dr. Beattie, in a note to the chapter, where he treats of imagination, gives a concise and plain view of the principles developed and proved by Berkeley in his *New Theory of Vision*, with a variety of illustrations. In inquiries yet to be made, as in some of the statements in the preceding sections on perceptions by means of sight, we shall not unfrequently be indebted to his writings. They do not discover the originality and acuteness of Locke or even of Berkeley, but are exceedingly more valuable than a variety of other productions of a more scholastick nature, which might be mentioned; and may profitably be put into the hands of inquirers into the principles of mind and of morals,

CHAPTER FOURTH.

NO INNATE KNOWLEDGE.

§. 43. *Innate ideas before the time of Mr. Locke.*

THE publication of Mr. Locke's *Essay on the Human Understanding*, has justly been considered as fixing an era in the science of Intellectual Philosophy. Before the publication of this work, which was in the year 1690, the doctrine of innate or connatural ideas was widely prevalent. By the phrase innate, or, to use an expression less ambiguous, connatural ideas, is to be understood certain ideas and propositions, which were held to be wrought into their intellectual nature and to be born with all mankind. It was maintained, that they were limited to no one class, neither to the rich nor the poor, neither to the learned nor the ignorant, to no clime and to no country, but all participated in them alike. These propositions and ideas, being coetaneous with the existence of the soul and being there

established at the commencement of its existence by the ordinance of the Deity, were regarded as the first principles of knowledge, and as the rules, by which men were to be guided in all their reasonings about natural and moral subjects. From these innate and original propositions the following may be selected as specimens of the whole.

§. 44. *Enumeration of innate principles.*

(1) Of the natural kind,

Viz., The whole is greater than a part; Whatsoever is, is; It is impossible for the same thing to be and not to be at the same time and in the same sense.

(2) Of the moral kind,

Viz., Parents must be honoured; Injury must not be done; Contracts should be fulfilled, &c.

(3) Of the religious kind,

Viz., There is a God; God is to be worshipped; God will approve virtue and punish vice.

If these propositions are innate or connatural with the mind, then the ideas, of which they are composed, must be innate; so that, whatever the number of propositions, there will be a yet greater number of innate ideas.

The doctrine of the existence of such innate ideas and propositions was supported by Des Cartes and Malebranche, names of such celebrity as to give at least a temporary currency to almost any opinion. The principal argument in support of this doctrine seems to have been this;

§. 45. *Argument on the subject of innate knowledge.*

All mankind universally exhibit an acquaintance with, and give their assent to ideas and propositions of this description; hence they are innate.

This argument is considered inconclusive, because the statement, which is made in it, is maintained to be untrue. It is undoubtedly the fact, that a part of the human race remain ignorant through life of the greater number, if not all of the propositions in question.

But admitting that all men are acquainted with them

and assent to them, this by no means proves them innate, so long as we can account for this acquaintance and this assent in some other way. It is admitted by all, that the mind exists, and that it possesses the power or the ability to acquire knowledge. If, therefore, in the exercise of this ability, which all admit it to have, we can come to the knowledge of what are called innate or connatural ideas and propositions, it is quite unphilosophical to assign to them another origin, in support of which no positive proof can be brought.

Further; if the doctrine of innate knowledge be admitted, ideas and propositions of this kind may be multiplied to any extent; every one will imagine himself at liberty to add to the number; they will unnecessarily be brought forward on a variety of occasions, and a most perplexing hindrance be thrown in the way of free inquiry and of the progress of knowledge.

§. 46. *Mr. Locke's opinions on this subject.*

Mr. Locke in the first book of his *Essay on the Human Understanding* has examined this subject at very considerable length. It has indeed been said of his argument, that it is both too long and not always sufficiently to the point, but it makes up in the variety and weight of its considerations what it wants in exactness of arrangement; and it will be found by no means easy to confute it.

It is one among the merits of this writer, that he has successfully laboured to do away many of our ancient prejudices, (what may be termed the rubbish of the science,) and shown us where to make a good and satisfactory beginning. In accordance with what there is so much evidence to consider the true doctrine, we are presented in his writings with the mind, not as a mere recipient, already in a good degree filled up with articles of knowledge, but as a principle or power of action; and all we have to do, is, to mark its operations, as they necessarily exist in consequence of its being furnished with the aid of the senses and surrounded with material objects. It knows nothing at the first; but it

possesses the ability to explore the forms of matter in its various shapes, to mark the aspects and the operations of intellect; and in this way it becomes possessed of a great variety of information. It is, therefore, a most wonderful principle, and, as it raises us far above the brute creation, it would for its own nobleness be highly worthy of the student's attention, even if no practical benefit should result from the pursuit.

§. 47. *Opinions of Plato and Aristotle.*

It may properly enough be remarked here, that the discussion on the subject of innate ideas and propositions is one of long standing. We refer in this remark to the statement, which a French writer, De Gerando, in his *History of Philosophy*, has given of the conflicting opinions of Plato and Aristotle, taking the translation of the passage, as we find it in an American periodical publication of merited reputation. "Ideas, (says Plato,) are not made up of deductions from experience. They have a different origin. It would be impossible to explain the production of them, if they were not independent of experience, and, consequently, innate, that is, placed in the mind by God himself, to serve as the elements of knowledge. Before they were communicated to us, they dwelt in the Divine mind, as so many forms or models, according to which the Deity arranged the universe."

The following is the reply of Aristotle.

"If ideas are innate (he says) how happens it, that we are not always conscious of them? And that it is so long before we obtain the knowledge, which they ought to impart to us? How can we have an idea of a thing, which we never perceived? To call our ideas models, on which existing objects were formed, is merely a poetical figure.

Who is there, that acts with his eyes fixed on these supposed models? We know, that objects may exist, may be made without reference to them."

"Plato was, therefore, (he says,) clearly in an error.

His *ideas* are evidently a product of the understanding, formed by a generalization of the particular qualities of individual objects."

It is this very question, namely, whether we have any ideas, any thing, which can be called knowledge previous to sensation; which divided different writers so late as the time of Des Cartes, who appears to have adopted sentiments, similar to those of Plato. It was this question, therefore, which Mr. Locke thought it necessary to examine at the commencement of his metaphysical writings, and with what ability is generally known.

§. 48. *Prevailing opinions at the present time.*

It would seem then from the remarks, which have been made, that in former times there has been a great diversity of opinion on the subject of the origin of our knowledge.

This diversity of opinion does not exist in so great a degree at present. Few are found, who hold to the doctrine of innate or connatural ideas and propositions, as that doctrine was formerly stated and maintained. The opinions of Mr. Locke on this subject, adopted with some slight modifications, are the opinions of nearly all mental philosophers, not only in America and England, but in France, and on the continent of Europe generally.

In the statements, which are to be made respecting the origin and combinations of our ideas, we have, accordingly, followed in his footsteps with such deviations, as might be expected from more recent, and, in some cases, more accurate and satisfactory inquiries.

CHAPTER FIFTH.

ORIGIN OF SIMPLE IDEAS.

§. 49. *Simple ideas received by means of the senses and from our mental operations.*

There is one class of our thoughts, which we term simple ideas, and with sufficiently good reason, since we know not, that they are in any degree compounded by being made up of other thoughts, or that they can be resolved into any thing more elementary. This class then naturally arrests our attention first.

When we look at the history of our simple ideas, with the intention of discovering, if possible, their true origin, we find, that they may be traced to two sources.

(1) Some of them originate in the senses, that is to say, are caused by means of external objects producing an affection of the senses.

(2) Other simple ideas arise to us or exist from reflecting on our mental operations.

In other words, the two predominant sources of our simple ideas are the world without and the world within; the external creation, between which and our bodily senses, Providence has instituted a common and reciprocal adaptation, and the internal, mental creation, which no sooner commences its various and appropriate exercises, than we are furnished with another series of simple ideas, which never could have been received from the senses alone.

These two sources of our simple thoughts, however they may have been by some writers confounded with each other, are entirely distinct; since the simple ideas, arising from the fact of the existence of certain mental operations, could not have been suggested by any thing, which takes place in the external world, independently of those opera-

tions. And this circumstance of itself sufficiently justifies the distinction, which has been set up between them.

There is, nevertheless, reason for saying, that those ideas, which are received from the senses, have the priority in point of time ; a fact, which it may be necessary briefly to illustrate.

As we know, that the human mind is not eternal, it is only to state the same thing in other words, when we say, that there must have been some particular period, when it commenced its existence or was created. If its acts or operations were not connatural and innate, of which, as appeared in the preceding chapter, there is by no means sufficient evidence, they must clearly have been subsequent in time to its creation. But while there is ground for saying, that our mental operations are subsequent to the creation of the thinking principle, the facts, which constantly present themselves to every one's attention, lead us to say further, that they are subsequent also to certain affections of the senses.

In other words, were it not for impressions on the senses, which may be traced to objects external to the senses, our mental capabilities, whatever they may be, would always have remained in a state of fruitless inaction.

Hence the process, which is implied in the perception of external things, or what is commonly termed by Mr. Locke *sensation*, may justly be considered the occasion or introductory step to all our knowledge.

But, although the presentation of external objects be the first occasion of the mind's becoming operative, it no sooner becomes such, than these operations furnish us with another set of ideas, as already remarked, which, by way of distinguishing them from those received through the direct mediation of the senses, may be termed ideas of *reflection*.

These two classes, then, simple ideas from the senses, and simple ideas from reflection, are the earliest, with which the mind is furnished, and are the elements or simplest materials of all our subsequent, intellectual attainments.

§. 50. *Of verbal explanations of simple ideas.*

In the remaining remarks on the subject now under consideration, it is necessary to warn the reader, that we shall, for the most part, merely state something of the mode or rather of the circumstances, in which this class of our thoughts occur to the mind, without pretending to be more explicit. Simple ideas admit of no definition, of no explanation, further than such statement of the circumstances, in which they are brought to view.

If any one should charge us with want of clearness and profess not to understand what is meant by the terms, extension, solidity, heat, cold, red, blue, sweet, unity, or other names of simple ideas, we know not that any thing can be done to clear up that mental obscurity, under which he labours, but merely to refer him to his own senses, to his personal experience, as the only instructor, from whom he will be likely to receive any tolerable satisfaction.

The subject of definitions, both in its connection with simple and with complex terms, will be further considered in the chapter on Language.

§. 51. *Division of our simple ideas.*

Mr. Locke, having reference to the mode, in which our simple ideas are received into the mind, has divided them into four classes;

- (1) Those, which are received by one sense merely;
- (2) Those, which are received from more than one sense;
- (3) Those, which are received from reflection or the observation of what takes place in our minds;
- (4) Those, which are received by reflection, and come into the mind also at other times, in various ways, by the senses; or which in some instances are received by sensation and reflection combined, and not separately, as in the simple idea of power.

And this seems to be the most natural division, which can be made, and, therefore, very well fitted to help us keep in memory the history of our early notions.

§. 52. *Of simple ideas from one sense only.*

To the class of simple ideas received from one sense only, belong the varieties of colour, such as red, white, yellow, green, &c., which are received by the sense of sight. To this class also belong all the varieties of sound, which are received by the sense of hearing; also the diversities of taste, received from the sense of taste.

The ideas of the sense of hearing do not belong to the sense of sight, nor those of sight to the sense of hearing; and this is so obvious, that it is needless to attempt to prove, how clearly the origin of the one is distinguished from that of the other set of ideas.

It may be remarked here, that not all our simple ideas have names. Only the prominent distinctions are thus marked, while there are many diversities in the sensations of touch, taste, vision, and, of the other senses, which are not.

§. 53. *Of simple ideas from more than one sense.*

There are other simple ideas, which we derive from more than one sense, such as figure, extension, motion. We perceive the extension of a body originally by means of the touch, but subsequently, when experience has given to the sense of sight its full power, are informed of it by the sight also.

The same of figure and motion.

As soon as we have learnt what significancy to attach to our visual perceptions, a subject, which was remarked upon in the third chapter, we have an idea of a statue by the sight and at once perceive, that it possesses form or figure; but the blind man, who has not the power of seeing, learns its figure no less accurately by the sense of touch merely.

When a solid body is moving with any considerable degree of rapidity from under our hands, such is the nature of the sensation produced, that we are immediately satisfied, that this body is changing its position. And we are equally satisfied of this, whether our eyes be open or shut.

In another case, for instance, when we see a boat putting off from a ship, we perceive the change of position or motion exclusively by the sight, the sense of touch being unaffected.

§. 54. *Of simple ideas from reflection.*

By the term, reflection, seems to be properly understood the observation of the operations of our own minds, as they are employed about the ideas, which they have gotten. Some of the simple ideas, which we receive from this source, are these, thinking, doubting, believing, judging, assenting.

When a proposition is stated with little or no evidence attending it, the mind, in reference to that proposition, is put into a position, to which we give the name of *doubting*. But if the evidence be considerably increased, the mental estimation, which we form, is altered in regard to it, and to this new state of the mind we give the name of *belief* or *believing*. The origin of other ideas of this class is similar, being the result of the observation of different states or operations of the thinking principle within us. They are rightly classed as simple ideas, since they are merely simple perceptions, and are no more compounded and can be no more resolved into any subordinate elements, than our perceptions of colour or taste.

§. 55. *Simple ideas from both of the above mentioned sources.*

There are certain simple ideas, which are received both by reflection and also by means of the senses; and such are the ideas of existence, succession, unity, and power. This will be the more clear from a few remarks, which remain to be made on each of them separately.

§. 56. *Of existence, unity, and succession.*

EXISTENCE is one of the ideas of this class. It is out of our power to define this idea, as it is all other simple ideas,

but it is clearly suggested to us by every external object, which we behold. Our minds also can never have ideas, or, what seems to be the same thing, be in successive states, without an attendant impression, that those ideas or mental states actually and truly exist.

The idea, expressed by the word *UNITY*, is suggested by whatever, whether internal or external, can be considered as one, and can be regarded as distinct and separate from any other object, about which the mind is employed. Hence, as ideas may be regarded in this way as well as outward objects, *UNITY* is properly considered one of those notions, which may be referred both to the senses and to reflection, and is conveyed into the mind from those sources in a variety of ways.

SUCCESSION is another idea, belonging to this class. Our ideas, while we are awake, are constantly going in a train, one coming and another departing. In this way, having this regular appearance and disappearance of thought forced upon our attention, we receive the idea of succession; and also by observing what takes place in external objects, such as the removal of bodies and the supply of their place by others, the changes of day and night, &c.

§. 57. *Origin of our idea of power.*

The idea of power, like those of existence, unity, and succession, is sometimes suggested to us from the senses, or what takes place in the external world, and sometimes from our mental operations or rather from the effects, which we observe to follow certain mental acts.

We find, by way of illustrating our meaning, that we are able by a mere volition to move several parts of our bodies, to go from place to place, and to do other things similar. We observe also, that physical bodies, external to ourselves, are able to cause certain effects, one on another, and hence there is suggested to us this idea.

But to be more explicit and to illustrate this statement by some instances, let it be observed, that the idea of power connects itself closely with cases of cause and effect.

and we become furnished with this idea by consulting such instances, whether they involve both mind and matter, or only material existences.

A cause is that, which immediately and always, in similar circumstances, is followed by a certain change; the change being the sequence or effect.

For example, fire and the melting of metals may be considered as standing to each other in the relation of cause and effect, or of antecedence and sequence; but although it be admitted to be true, that we know nothing more than the mere fact, that one precedes and the other follows, yet we at once and as it were of necessity have the idea of power.

Again, we learn, that the loadstone has the quality of drawing iron, but all we can properly understand from this statement, is, that when the loadstone is made to approach the iron, the iron moves; still we leave it to any one to say, whether we have not the idea of power. It is the same in other cases, where material bodies placed in certain circumstances are constantly followed by changes in other bodies; we associate with all such instances the idea of power.

But let us in particular reflect a moment on those instances, where the antecedent to the effect produced, is mind, is some intellectual operation or existence.

We exercise that desire or choice, to which we give the name of volition, and, immediately consequent on that volition, there is a motion of the hand.

In the beginning the world was in darkness; God said, Let there be light, and light was.

The Saviour said, Lazarus, come forth, and he arose from the dead.

In these cases we have the antecedent and consequent, the volition and the effect.

It seems to us very clear, that, in all cases when such antecedents and sequences are placed before the mind, especially when the antecedent, as in the cases last mentioned, is intellectual and intelligent, we immediately have

the idea of power, the same as when bodies of a certain colour, are placed before us, and we have the idea of whiteness or redness.

But we are perhaps called upon to give a definition or explanation of power. The reply is, that power is a simple and uncompounded perception. In all cases of invariable and immediate antecedence and sequence, it at once and necessarily arises in the soul. In such cases as when God said, Let there be light and light was; it is an idea vivid and overwhelming.

Introduced, therefore, into the mind under such circumstances, and being a simple idea, which can be resolved into no subordinate elements, we could give no definition of it, if we desired to; and to insist on a definition, where the idea is so obviously of such a character, seems to have no more reason in it, than to demand a verbal definition of the simple perceptions of taste, of hearing, and of sight.

§. 58. *Of the evidence in favour of this account of the origin of our ideas.*

It was remarked in a preceding section, that no positive proof could be brought in confirmation of the once prevalent doctrine of innate ideas, and it is natural to inquire what direct and positive evidence is there in favour of the account, which has now been given of the origin of our early thoughts?

In answer to this inquiry let it be observed, in the first place, that the statement, which has been made on this subject, recommends itself to the common experience, to what every individual can testify, to a greater or less degree, in regard to himself.

Our ideas at first are few in number; they are suggested by the objects, by which we are immediately surrounded; the greater number are from the senses or are forced upon us by our immediate wants, and a very small proportion only are abstract and remote. But we find, as we advance in years, as we become more and more acquainted

with facts in the natural world, and have more acquaintance with our fellow men, our ideas multiply, our views are more extensive, and that we no more jump at once into the full stature of knowledge, than we advance without any intermediate growth from infancy into manhood.

This is the general experience, the testimony, which each one can give for himself.

If, in the second place, having ourselves arrived to some degree of mental capacity and information, we observe the progress of the mind in infancy and childhood in those of our fellow beings, who have just entered on the early stages of their pilgrimage, we shall find, as far as we are able to judge from the facts coming within our observation, the same process going on in them, which our consciousness of the present and our memory of the past, "even from our boyish days," enables us to testify with no little confidence in our own case.

To the infant its nursery is the world. Its first ideas of the human race are its particular conceptions of its nurse and its mother; and the origin and history of all its notions may be traced to its animal wants, to the light, that breaks in from its window, and the few objects in the immediate neighbourhood of the cradle and of the hearth.

And, in the third place, it is not too much to say, that all the observations, which have been made on persons, who from their birth or at any subsequent period, have been deprived of any of the senses, and all the extraordinary facts, which have come to knowledge, having a bearing on this inquiry, go strongly in favour of the views which have been given.

It appears, for instance, from the observations, which have been made in regard to persons, who have been deaf until a particular period, and then have been restored to the faculty of hearing, that they have never previously had those ideas, which naturally come in by that sense. If a person has been born blind, the result is the same; or if having the sense of sight, it has so happened, that he has never seen any colours of a particular description. In the

one case he has no ideas of colours at all, and in the other, only of those colours, which he has seen.

Of those extraordinary instances, to which we alluded, as having thrown some light on the history of our intellectual acquisitions, is the account, which is given in the *Memoirs of the French Academy of Sciences* for the year 1703, of a deaf and dumb young man in the city of Chartres. At the age of three and twenty, it so happened, to the great surprise of the whole town, that he was suddenly restored to the sense of hearing, and in a short time he acquired the use of language. Deprived for so long a period of a sense, which in importance ranks with the sight and the touch, unable to hold communication with his fellow beings by means of oral or written language, and not particularly compelled, as he had every care taken of him by his friends, to bring his faculties into exercise, the powers of his mind remained without having opportunity to unfold themselves. Being examined by some men of discernment, it was found, that he had no idea of a God, of a soul, of the moral merit or demerit of human actions, and what might seem to be yet more remarkable, he knew not what it was to die; the agonies of dissolution, the grief of friends, and the ceremonies of interment being to him inexplicable mysteries.

Here we see how much knowledge a person was deprived of, merely by his wanting the single sense of hearing; a proof that the senses were designed by our Creator to be the original sources of knowledge, and that without them the faculties of the soul would never become operative.

The instance of the young man of Chartres is more particularly examined into, in Condillac's *Essay on the Origin of Knowledge*, at Section fourth of Part first, and the whole book may well be consulted by those, who wish for further information on this whole inquiry.

§. 59. *Simple ideas the elements of all our knowledge.*

Admitting the correctness of the views, which have been given, it follows, that from our simple ideas all others are derived.

As to the power, which we possess over the ideas in the mind, it may be observed, that we have no power to destroy or annul them by a mere volition; nor does it appear, that we are always able to detain an idea in the mind and make it an object of contemplation to the entire exclusion of others, at least, for any length of time. We can exert this power only in an imperfect degree.

But we have power,

(1) Of comparing ideas together in various respects, such as extent, degrees, time, place.

We have the power,

(2) of combining or compounding, an operation, by means of which we form what are termed complex ideas out of two or more simple ones variously put together.

CHAPTER SIXTH,

SIMPLE AND MIXED MODES.

§. 60. *Division of complex ideas into three kinds.*

Those ideas, which are purely simple, are few in number, and may all be either traced, on the one hand, to some affection of the senses, or, on the other, to reflection, which is that observation or notice, which the mind takes of its own operations. But by the aid of the small number of simple ideas, a vast number of others are formed, which are termed complex. The power, which we possess, of forming complex ideas from simple ones, may be compared to our power of uniting together the letters of the alphabet in the formation of words, which are of themselves few in number, but lay the foundation of almost innumerable combinations.

Complex ideas are divided into three kinds, **MODES, SUBSTANCES, and RELATIONS.**

Modes are that class of complex ideas, which are sup-

posed not to exist independently by themselves, but are rather the dependencies on, the attributes, or the affections of substances ; such as are expressed by the words, honour, gratitude, treachery, robbery, and also by the names of numbers and of mathematical figures, as dozen, twenty, square, parallelogram.

On this class or division of complex ideas we are to remark first ; and shall consider them under two heads, viz., simple modes and mixed modes.

§. 61. *Of complex ideas called simple modes.*

SIMPLE MODES are complex ideas, made up of those simple ideas, which are all of the same kind ; in other words, they are merely different modifications of the same original thought, carried on to a greater or less extent, but without any intermixture of foreign materials.

Of this class of ideas are a dozen, a score, a thousand, which are simple modes formed by the repeated addition of units as far on as the collections, specified by those names.

To this class belong ideas of time, as an hour, a day, a month, a year ; and also ideas of extension in length, as a furlong, a mile, a league.

§. 62. *Of simple modes from number.*

The idea of unity is derived in some instances from the senses. That is to say, it is always suggested to the mind, whenever we find ourselves able to consider any external object, as distinct and separate from other objects. The consciousness also, which we cannot avoid, that the mind has different ideas or is in different states, and that, consequently, there is a real line of distinction between each succeeding state and that, which went before, gives us the same notion of unity or oneness. So that it is an idea, which we become possessed of, both by means of the senses, and from reflection ; but it is a simple idea, as we cannot resolve it into any thing more elementary.

What are termed the simple modes of number, are formed by the repeating or addition of the original idea, and it is worthy of remark, that there is the utmost distinctness, a marked line of separation between each mode. The numbers, one, two, and three, are as distinct and separate from each other, as one hundred and two hundred.

Names are necessary to numbers. We repeat the idea of an unit, and this repetition or addition becomes a collective idea, to which we give the name of **two**. To the collective or complex idea, which arises on the addition of another unit, we give the name of **THREE**; all enumeration being only the addition of units with the giving of names to the collective ideas thus formed. As diversities in numbers are only differences of more or less, and are not distinguished from each other by size or colour, or in other ways, but only by addition and subtraction, there seems to be the more need of names. If it should be admitted to be possible, that we may have simple modes of number without giving names, it is very evident, that without names we could not employ them in enumeration; so that they would in that case be entirely useless.

We find, that many uncivilized tribes of savages are unable to carry enumeration to any great extent, not because their minds are naturally incapable of this operation, but in consequence of the scanty materials of their languages. Mr. Locke mentions a Brazilian tribe, called the Tououpinambos, who had no names for numbers above five; any number beyond that they made out by showing their fingers and the fingers of those, who were present. When savages wish to express a very large number, they remind us of the leaves on the trees, the stars in the sky, and the sands on the sea-shore.

And the same remark a little qualified will apply to communities somewhat raised above the savage state. Thus Abraham was led abroad at night, and was commanded to try and number the stars; a much more expressive intimation of the great increase of his posterity, than could have been conveyed by the restricted power of the He-

brew numerals. See also the passage in the seventh of Judges, where the camels of the Midianites are compared to the sand by the sea-side for multitude.

In view of these remarks, two rules may be laid down in regard to correct enumeration,

(1) That the mind distinguish carefully two ideas, which differ from each other only by the addition or subtraction of an unit;

(2) That it retain in memory the names or marks of the several intermediate combinations from an unit to the number, which completes the sum. Without an observance of these directions no one can be assured, that he has made a correct enumeration.

§. 63. *Extraordinary instance of skill in the use of numbers.*

A peculiar instance of ability in the combination of numbers may properly be mentioned here; observing, however, in regard to the statement, that we have no other authority for its correctness than the weekly gazettes, but we see no reason to doubt its correctness.

A young lad in the State of Georgia, at this time (1826) ten years of age, can reduce any given number of miles to inches, years to seconds, &c., performing the whole operations in his head, and will give the result as quick as an expert calculator can with a pen. Among the questions asked him, were the following, which he solved with ease and expedition; How many inches are there in 1,373,489 miles? How often will a wheel, 5 ft. 6 in. in diameter, turn over in ninety miles? What is the cube root of 24,743,682? He has on more than one occasion, and even before he was nine years of age, raised the number twelve to its fifteenth power—that is to say—multiplied that number into itself fifteen times. He can multiply three figures by three figures. This faculty was discovered in the lad at about eight years of age and has greatly improved since.

Some might look upon this as a sort of supernatural intuition; but certainly without good reason. It is indeed extraordinary, but is a mere act of the memory, and differs

from ordinary cases, only in going so far beyond the reach of ordinary power. The distinction between the numbers is kept up; if he have any new method of combining the numbers, he is under the same necessity with others of giving separate names to each combination; there is no embarrassment, but the perception is exceedingly rapid, and the power of memory wonderful.

§. 64. *Simple modes from duration.*

It was remarked in speaking of our simple ideas, that our idea of *SUCCESSION* was obtained in this way. Our ideas, while we are awake, are constantly going in a train, one coming and another departing. In this way, having this regular appearance and disappearance of thought forced upon our attention, we receive the idea of *SUCCESSION*; and also by observing what takes place in external objects, such as the removal of bodies and the supply of their place by others, the changes of day and night, &c.

It is by the aid of the simple idea of succession, that we form the idea of *DURATION*, the ideas formed from which last have a claim to be ranked with the simple modes.

We are conscious not only of our existence, but of the continuance of our existence, or of our *PERSONAL IDENTITY*; we take it for *granted*, or rather it is forced upon us as an original characteristick of our minds, in every thing we do, in every step of reasoning. This indelible conviction, that we are what we have been, being considered in connection with our succession of ideas, gives rise to our idea of duration. So that whenever we can speak of our existence as commensurate with or measured by a certain number of ideas, we are furnished with this additional notion, to which the name of *DURATION* is given.

As we cannot have the notion of duration without succession, hence it happens, that we know nothing of duration, when we are perfectly asleep, because we know not, that there are then any of those intellectual changes, which we term succession of ideas. If a person could sleep with a perfect suspension of all his intellectual operations from

this time until the resurrection, the whole of that period would appear to him as nothing. Ten thousand years passed under such circumstances would be less than a watch in the night.

That it is only by comparing that consciousness, which, when awake, ever attends us, of the permanency of our own existence, with that ever successive change of states, to which the immaterial part of our being is subject, that we acquire our notions of duration, is in some measure proved by a variety of facts, which have been ascertained and preserved.

There is, for example, in the French work, *L'Histoire de l'Academie Royale des Sciences pour l'annee, 1719*, a statement to the following effect.

There was in Lausanne a nobleman, who, as he was giving orders to a servant, suddenly lost his speech and all his senses. Different remedies were tried, but, for a very considerable time, without effect. For six months he appeared to be in a deep sleep, unconscious of every thing. At the end of that period, however, resort having been had to certain chirurgical operations, he was suddenly restored to his speech and the exercise of his understanding. When he recovered, the servant, to whom he had been giving orders, when he was first seized with the distemper, happening to be in the room, he asked him, if he had done what he had ordered him to, not being sensible, that any interval, except perhaps a very short one, had elapsed during his illness.

We get the idea of TIME, by considering any part of duration, as set or marked off by periodical measures, such as days or years. And it should be remarked, when we consider our design of tracing all our ideas to sensation and reflection, that we obtain the idea of these lengths or measures by means of the senses, viz. by our observation of the annual and diurnal revolutions of the sun.

Under the simple modes from duration, then, may be reckoned minutes, hours, days, months, years, indeed every division, of which duration is susceptible.

§. 65. *Simple modes from extension.*

To extension, which is a simple idea, derived from the senses of sight and touch, we give the name of length, when it is contemplated as existing only in one direction.

All our artificial measures of extension, such as an inch, a foot, a yard, a furlong, a mile, a league, a degree, whatever may be the process of the mind in forming those measures, are among its simple modes.

That is to say, if we adopt an inch as the original measurement or the unit, from which we are to begin, then a foot consists of parts of extension, signified by the term inch, multiplied twelve times; and a yard is the same measure, increased or multiplied thirty six times.

§. 66. *Idea of infinity.*

Of our idea of infinity it seems difficult to give any satisfactory explanation or to say with certainty where it should be classed, but there are three things, with which we are in the habit of connecting it, viz. number, duration, and extension.

We form the idea of infinity of number by adding numbers as far as possible, with the additional notion, that this process may be carried on to any extent.

We form the idea of infinity of duration by repeating the ideas of time, such as an hour or a day, the same as in number.

We obtain the idea of infinity of extension, or rather of that modification of extension, which is termed LENGTH, in the same manner, by repeating the ideas of an inch, a foot, a yard, or some other measure, always feeling, when we have carried on this addition to the utmost extent of which we are capable, that it may be prosecuted still further, indefinitely.

We seem to ourselves to receive the clearest idea of infinity from number, because the distinction between all its modes is very accurately marked, so that we have a well defined perception of it. Indeed it does not appear, that,

without the assistance of number, we could ever form the ideas of infinity of duration and extension.

We obtain the idea of *ETERNITY* by supposing our ideas of time, for instance, a month or year, repeated in both directions, in time past as well as in that which is to come, always keeping the idea of the possibility of the further prosecution of this process of repeating.

§. 67. *Of the complex ideas called mixed modes.*

Mixed modes are complex ideas, the attributes or dependencies of substances, compounded of simple ideas of different kinds. Instances are the ideas of theft, murder, gratitude, &c.

THEFT is a change of property without the consent of the owner; consequently, embraces among other ideas, differing from each other, those of ownership, transference, and consent.

MURDER is putting a person to death with evil intention or malice aforethought; consequently includes the ideas of man, death, evil feelings.

GRATITUDE is an emotion of love or complacency towards a person for some act of kindness, which he has done to us. In this mixed mode, therefore, we have reference, not only to the person, who has received the benefit, but to the person, who conferred it, as well as to the act itself and the intellectual emotion excited.

§. 68. *Three ways of forming mixed modes.*

There are three ways in particular, in which we appear to receive into the mind *MIXED* modes.

(1) The first method is by experience or observation of the things themselves.

We see a person wrestling, swimming, or fencing, and thence learn the ideas, conveyed by those words.

(2) The second method is by invention or voluntarily putting together several simple ideas in our own minds.

The person, that first invented etching or printing, had an acquaintance both with the complex ideas, and some

subordinate ideas conveyed in those terms, before they could have existed in the minds of others.

(3) Third method,—By taking ideas, which already exist in the mind, and which, being generally known, may be considered common property, and combining them together; for example in the word, falsehood.

By examining the mixed modes and tracing them to their original elements, we shall find them ultimately connected with the great sources of our knowledge, sensation and reflection.

§. 69. *Not the same mixed modes in all languages.*

The customs, habits, modes of thinking, political institutions, &c are not the same in all countries, but differ in greater or less degree. Hence there is need of different expressions that is, of expressions in one language not precisely corresponding to expressions in another.

Thus the word, *OSTRAKISMOS* in the Greek, *PROSCRIPTIO* in the Latin, and *CORBAN* in the Hebrew, expressed ideas, to which most other nations found nothing precisely corresponding, and, consequently, had no corresponding term.

This suggests a remark on the changes, which take place in languages. It is well known, that there are constant alterations in customs, and hardly less frequent fluctuations in feeling and opinion, and hence there necessarily arise new combinations of thought or ideas; and these must be expressed by new names.

If people should be found unable or unwilling to invent new names for the expression of new complex ideas, they would evidently be subjected to great inconvenience. This may be seen, if we deprive ourselves of the benefit of any complex terms, for instance, *reprieve* and *appeal*, and attempt to converse on the subjects, where they naturally occur.

We do not consider a mixed mode, as actually existing in a language without a name.

The number of mixed modes, therefore, in any language, although it might be greatly increased, is looked

upon as limited by the number of names or words, by which they are expressed.

CHAPTER SEVENTH.

IDEAS OF SUBSTANCE.

§. 70. *What we are to understand by ideas of substance.*

In regard to those material bodies, by which we are surrounded, we can properly and in truth be said to have a knowledge only of those qualities in them, which are the cause of our simple ideas, or of which our simple ideas are representative. We truly know this, and nothing more; it being altogether beyond our power to form an acquaintance with that, whatever it is, which is imagined to be the essence, *SUBSTRATUM*, or support of these qualities.

The sentiment here conveyed is expressed in shorter terms by saying, that our knowledge of bodies is limited to the knowledge of their properties.

An idea of substance is that complex state of the mind, which considers a number of qualities, belonging to any particular substance as one, or as naturally and permanently united. And this is the second general division or class of our complex ideas.

Instances are the complex ideas, expressed by the words, sun, loadstone, man, horse, iron, tree, indeed all those intellectual states, which correspond to that great variety of separate, material objects, which continually come beneath our inspection.

In the idea of man we have, among others, the simple ideas of figure, colour, motion, conscience.

§. 71. *Spiritual existences included under this class.*

But ideas of substance are not to be limited, as might

at first from these remarks be inferred, to material objects; this division includes many from another source. Under this class is to be included our ideas of spiritual existences, of the mind, of the soul in its disembodied state, of angels, of God himself.

It is true, they are not substances in the ordinary meaning of the term, that is, they are not *material* substances, like the sensible objects, with which we are so much conversant, and to which we almost exclusively apply that name.

But they are substances in this sense,—they are real and not imaginary,—they have an existence,—they are not the mere relations of one thing to another, not the mere dependencies on them, but the things themselves.

But some will doubt, whether we have that clear knowledge of mind and of spiritual things in general, which we have of bodies material; and on this ground think, that they ought not to be included in the same division of our complex notions.—This is a point, worthy a moment's notice.

§. 72. *Our knowledge of spirit the same as of matter.*

Although it may appear strange to some, when we say, that we know no more of matter, about which we are daily conversant, and which we see and touch, than concerning mental or spiritual existences, which our bodily senses are unable to approach and examine, it is a sentiment at last almost universally received, and with the very best reason. It has already been remarked of matter, that we know nothing concerning it but by its properties, and we know nothing of immaterial existences likewise, except by their properties; and our knowledge, therefore, is in both cases on the same footing, being the same in kind at least, if not in degree. Our acquaintance with the properties of material bodies may possibly go further than our acquaintance with those of mind, but it is in both cases circumscribed by the same limitation, unable to advance beyond those properties.

Observing certain mental operations, thinking, remembering, willing, assenting, doubting, and the like, we cannot avoid the conviction of the existence of something, to which they belong, or of which they are qualities; and we call it spirit or a spiritual being.

The same of matter;—we learn its qualities, primary and secondary, colour, extension, figure, motion, divisibility, &c.; and these, viewed by the mind in their state of combination or as having a common and coetaneous origin, give us the idea of what we call matter or substance.

If it be asked, how it happens, that we so uniformly refer these operations to what we term substance or spirit, or rather how they are so promptly suggested on the observation of the properties, (there being an universal belief in the existence of the material and spiritual world,) the only answer is that, already remarked upon in the second chapter; viz. *That we thus constituted*; we are under a sort of *necessity*, in consequence of the natural tendencies of our constitution, of connecting with the appearances, which we witness, the idea of a really existing something, which we call, either matter or mind, material or spiritual, according to the character of those appearances.

But when this idea is once suggested, we are taught by the inutility of our efforts to proceed any further, that we have reached one boundary of our knowledge, which we cannot pass; and that while we have an idea of matter and spirit, and cannot but believe in their existence, we know no more of them, nor shall we probably ever know more, than these appearances and operations, whatever they may be, which they shall exhibit.

§. 73. *Of cohesion of bodies and motion by impulse.*

If there be any, who, after what has been said, think they understand matter better than they do spirit, then would we desire them to give an explanation of what that is in matter, which is termed cohesion. That the particles of gold, of iron, of water, and other material bodies are held together by what is termed cohesion, is a fact, which

being within our daily observation, no one is inclined to doubt, but it is the fact only which we know, and nothing more.

One body impinging on another puts it in motion, and we term it motion by impulse. But how motion passes from one body to another, when the particles of those bodies come in contact, if indeed there can be any actual contact, is by no means so easy to be determined. It will be found as difficult to be understood and explained as any of those obstacles, which are supposed to stand in the way of a full knowledge of spiritual existences.

Some further illustrations of this subject in particular instances remain to be made.

§. 74. *Explanations on certain ideas of this class.*

If called upon to give an account of the loadstone, which is the name of one of the many ideas of substance, we could give no other answer than by an enumeration of its qualities,—something, which has colour, hardness, friability, power to draw iron.

The sun has been mentioned, as one among the complex ideas of substances, but little more do we know of it than this, that it is an aggregate of certain qualities or simple ideas, such as brightness, heat, roundness, regularity of motion.

We say of gold, that it is a combination of the qualities of yellowness, great weight, fusibility, ductility, &c. existing together, and forming the material substance, to which we give that name.

§. 75. *Remarks on complexity in the states of the mind.*

It would seem from the statement thus far given in regard to our ideas of substance, that there is in this class of our thoughts a complexity in the state of the mind, corresponding to the complexity in the object, and without this complexity, in all cases, of the intellectual principle, there cannot be what is termed a complex idea. But it is not to be

thought, that we arrive at this ultimate complexity of mental state by a single act, by an undivided and inseparable movement of the mind, although, such is the rapidity of the process, it may in some cases seem to be so.

On the contrary, every simple idea, involved in, and forming a part of the compound, so far as we have any distinct conception of the compounded idea, passes under a rapid review, and the complex state of the mind or complex idea is the result of this rapid review.

We cannot, for instance, have a complex idea of man, of iron, or of a tree, without having first, at some time, subjected each simple idea of which it is made up, to a particular examination.

This glance of the mind at the various simple ideas is performed indeed with such extreme quickness, at least generally so, that the successive steps of it are not recollected; but this, when we consider the rapidity of the mind's operations in other instances, is no sufficient objection to the statement, which has been made.

The process in the formation of complex ideas goes on from step to step, from one simple idea to another, but when the examination is completed, the ultimate state of the mind, which the completion of the process implies, is not to be considered as in any degree wanting in unity or oneness.

§. 76. *Connection existing between material substances to be considered.*

In forming our complex ideas of substances, it is highly important, that they should be conformed, as nearly as possible, to the real nature of things; and that we should not combine in the idea any thing, which is not in the substance. And in order to this, it should be remembered, that bodies are operated upon one by another, and exhibit to us different qualities, in consequence of this operation.

One of the qualities of gold is yellowness, but break off entirely the intercourse between the particles of gold and the rays of light, and yellowness ceases. Life and motion are ideas, which commonly enter into our complex

notion of animals, but deprive them of air ; and life and motion are gone.

We would not say, that, in these particular instances, in our complex ideas of gold and of animal, that these ideas, yellowness, life, and motion are to be struck out ; but use them merely as an illustration, that in making up our complex notion of any substances, we are to consider not only the objects themselves, but also to take into view other objects, which have an influence on them.

§. 77. *Of chimerical ideas of substances.*

There are certain ideas, the consideration of which properly falls in this chapter, termed CHIMERICAL ; the ideas, for example expressed by the words, centaur, dragon, hypogriff, harpy.

The centaur is represented, as an animal, partly man, and partly horse. The dragon is supposed to be an immense serpent furnished with wings and capable of making its way through the atmosphere by their aid. The hypogriff is an imaginary horse, capable of performing aerial journeys in the same way.

Ideas of this kind are termed chimerical, because there is nothing corresponding to them in nature,—there is no reality of the sort intimated by the term.

If a person were known to have an idea of a body, yellow or of some other colour, malleable, fixed, possessing in a word all the qualities of iron or of gold with this difference only, of its being lighter than water, it would be what we term a chimerical idea—that is—it would have nothing corresponding to it in the nature of things.

§. 78. *Of what is meant by real ideas.*

REAL IDEAS are the opposite of chimerical, having a correspondence with natural things, or being such ideas as things in their true nature are fitted to produce.

Hence simple ideas are real, because there can be no simple idea, except it be such as nature in some of its forms is fitted to produce within us ;—also simple modes

are real, because they are only the multiplications or repetitions of some simple idea.

Excepting such chimerical ideas, as were mentioned in the preceding section, viz. dragon, centaur, faery, harpy, hypogriff, ghost, hobgoblin, iron lighter than water, &c. all ideas of substance are real. But when we speak of ideas of substance, with such exceptions as above, being real, we do not mean to say, that they do perfectly and in all respects represent their corresponding objects.

In our complex idea of gold, we combine the simple ideas of yellowness, weight, malleability, and perhaps others, but probably none combine, in their conception of it, all its properties; so that, although we speak of it, as a *real*, we do not speak of it, as a perfect or adequate idea. The same of other instances.

Further, it may be incidentally remarked, that chimerical ideas are in general formed in times of ignorance and superstition, and people suppose themselves to see what in truth never was seen by them.

§. 79. *Importance of having real ideas.*

Ideas are the elements or materials, about which the mind is employed in its various operations, and without which we can neither have opinion, nor faith, nor reasoning, nor knowledge. It is true, that those ideas, which are termed chimerical, and of which there are no archetypes in nature, admit of being compared together, and if we adopt the definition given by Mr. Locke, that KNOWLEDGE is the perception of the agreement or disagreement of ideas, they may be considered as furnishing grounds of knowledge, but the superstructure will partake of the character of the foundation; in other words, it will be CHIMERICAL.

We might ever so long puzzle ourselves in the investigation of such fantastical thoughts, and in the end be none the wiser.

The greater number a person has of such ideas, he is so much the poorer, as we do not account a man rich,

whose coffers are filled with "hay, wood, and stubble," instead of the precious metals.

Every person, therefore, is not to be considered well furnished, who has a great number of ideas, merely from the circumstance of the greatness of their number; but their character in various respects, their justness, their objects, and their conformity to those objects are to be taken into consideration; which is much the same as to say, that a few real ideas are of more value, than many chimerical ones.

§. 80. *Of our ideas of angels.*

We have our knowledge of mind in the same way as of matter, that is, by an observation of its qualities. And we are led from the accounts given of celestial messengers, to conceive of that class of beings, to which the term, *angels*, is applied, as if there were some resemblance or analogy, existing between our minds and them; in other words, we regard them, as spiritual or immaterial.

But we do not speak of them, as to their nature and powers, with the same degree of confidence, with which we speak of the human mind and of matter, since they are a class of beings, not coming under the examination of the senses, neither are they to be examined by us in the way, in which we can form an acquaintance with our own intellectual part.

For our knowledge, therefore, of angels and of any other class of beings superior to ourselves but subordinate to the Deity, we must rest satisfied with what information is given us in the Holy Scriptures.

§. 81. *Origin of the idea of God.*

Among the complex ideas, included under this class, is to be mentioned in particular that of God; and the origin of it on the principles of Mr. Locke, which are in the main adopted in this book, seems to be naturally accounted for in this way.

We suppose a person entirely separated from the rest

of the world, dwelling in some distant island, and furnished, as it were, only with the senses, and with the variety of objects around him, fitted to operate upon them.

He will, in the first place, connect together certain things, as antecedents and consequents, or what is the same thing, as causes and effects, such as the waving of woods and the blowing of the wind, the wearing away of the shore and the motion of the waves against it.

Having in this way formed an idea of antecedent and consequent, it will be found, in the second place, that the thought will, ere a long period, arise slowly and dimly in his mind, that those appearances in nature, which he has been in the habit of regarding as antecedents or causes, should themselves have a cause; that while the tempest breaks down in his own sight the forest, there should, and must be some one to guide the storm, and while the shore crumbles beneath the incursions of the ocean, there must be something, though where or what it is, he cannot tell, which both pushes on and restrains its raging.

The idea, at first, it must be admitted, is an obscure one, but it in time becomes less so; for nothing can be more true than the assertion of the Psalmist, that, in reference to the glory of God, "Day unto day uttereth speech, and night unto night showeth knowledge."

We remarked in regard to the great first Cause, which the natural workings of soul in our solitary islander will sooner or later inevitably discover, that he is unable to say, where or what it is; and this inability becomes in the end, a favourable circumstance. He cannot say of that first Cause, that it is in the stars, or in the ocean, or in the wild waste of the wilderness, but conscious of this inability to discover it in any particular place, he learns to identify it not with one merely, but with *every* "local habitation," and to associate it with all unmeasured space, and although he can in one sense say, it is no where, he can, in another, say, *God is every where.*

CHAPTER EIGHTH.

IDEAS OF RELATION.

§. 82. *What we are to understand by ideas of relation.*

The third, general division of our complex ideas is into IDEAS OF RELATION, which are formed by the comparison of our thoughts, one with another.

The mind, in the exercise of its various operations, has the power of considering objects or rather the ideas standing for objects, in such a manner that it does, as it were, bring them together and set them side by side, and see how they conform to each other, or how they differ;—in other words, discovers their relations. Take this illustration.

When we consider Lorenzo, as distinct and separate from all others of his fellow beings, and make Lorenzo alone and exclusively the subject of our contemplations, we have merely the complex idea of a man, bearing that name. But then Lorenzo may be a father, a son, a brother, a citizen, a legislator; these terms express ideas of relation.

When we speak of Lorenzo as a father, the mind first turns itself from the man himself to his children, and having considered the relation they sustain, with sufficient reason ascribes to him the attribute of paternity.

Any of our ideas, already existing in the mind, may lay the foundation of other ideas of relation, since they may in general be compared together, or, at least, if they cannot themselves be readily placed side by side, may be the occasion of bringing others into comparison.

§. 83. *Of the great number of our ideas of relation.*

Mr. Locke has the remark, that it would make a volume to go over all sorts of relations, and with good reason;

since they are as numerous, as that almost endless variety of respects, in which our ideas may be compared together, and of that multitude of circumstances, which are to be taken into view in such comparisons. With the single idea of man how many others are connected in consequence of the various relations, which he sustains !

He may, at one and the same time, be a father, brother, son, grandfather, grandson, father-in-law, son-in-law, husband, friend, enemy, subject, general, judge, patron, client, professor, European, Englishman, islander, servant, master, possessor, superiour inferiour, bigger, less, older, younger, contemporary, like, unlike, together with sustaining a variety of other relations too numerous to be mentioned. We shall not pretend, therefore, to exhaust the subject, but shall leave it to the reader more fully to pursue it, as opportunity and inclination may prompt, having first submitted to him a few prominent hints.

§. 84. *Of the use of correlative terms.*

Correlative terms are such terms, as are used to express corresponding ideas of relation.

They suggest the relations with great readiness, and by means of them the mind can be more steadily, and longer, and with less pain, fixed upon the ideas, of which they are expressive. The words, father and son, legislator and constituents, brother and sister, husband and wife, and others of this class, as soon as they are named, at once carry our thoughts beyond the persons, who are the subjects of these relations, to the relations themselves. Wherever, therefore, there are correlative terms, the relations may be expected to be clear to the mind.

The word, CONCUBINE, is a relative term, but there being no word correlative, expressing a corresponding relation, we find it more difficult to form a conception of the thing signified, than of brother, which has the correlative, sister, and of wife, which has the correlative, husband.

It should be remembered, that the relation is something different from the things related.

A person may sustain the relation and be called a father to-day, and to-morrow his children may be dead ; still he is the same man, though this relation has ceased. The relations, which we sustain are frequently changing, while the subjects of them are the same.

§. 85. *Of proportional relations.*

Among the various, subordinate divisions, of which our RELATIONS are susceptible, there is one class, including a considerable number of ideas of this kind, called PROPORTIONAL RELATIONS.

In this minor division may be included all those ideas, which are capable of being considered as made up of parts or as susceptible of different degrees ; and of consequence, admitting of being compared as to more or less. Hence their name, because we consider the proportion which they sustain to others, as to size or degrees.

Instances are whiter, sweeter, holier, larger, smaller, nobler,—indeed all adjectives, which admit of being put into the comparative or superlative.

We cannot say of one apple, that it is sweeter than another, or of one man, that he is holier than another, without involving the supposition, that they have been compared together, the apples as to their degrees of sweetness, and the persons spoken of as to their degrees of holiness.

§. 86. *Certain terms are relative which are supposed to be positive.*

There are certain terms also, whether they are to be classed with the proportional relations or not, is not essential to inquire, but which are supposed to be positive terms and not to intimate any comparison or relative consideration of other ideas ;—we allude to no small number of adjectives in the positive degree ;—take as instances, the epithets wise, ignorant, rich, poor, old, young. However these may at first sight appear to be entirely positive, and have been considered to be so, and as excluding any comparative references, they may be found on examination to

be of a somewhat different character from what has often been imagined.

Let it, then, be considered what we mean, when we say of a person, He is old ; we evidently compare him in regard to his age, whenever we use those expressions, with others, with people in general, and place the particular number of years, to which he may have attained, by the side of that period, which we are in the habit of regarding as the ordinary limit of man's pilgrimage.

The same, when we say of any person, that he is young ; he is then considered as falling far short of an assumed period, an approximation to which gives to another person the reputation of age.

Again, when we say of any individual, that he is wise or ignorant, we tacitly make a comparison of what he has learnt with the acquisitions of mankind in general. If it exceed the ordinary sum of human knowledge, we call him wise ; if it fall short, he is characterized, as ignorant.

Accordingly, a comparison of this sort being implied in the use of epithets, a North American savage, or a person of any other uncivilized race, might enjoy the reputation of great wisdom among his own people, who could not but be accounted ignorant in any philosophical society of a civilized nation.

§. 87. *Of ideas of natural relations.*

SECONDLY ; Having mentioned proportional relations, as forming a minor or subordinate division of this third, general class of our complex ideas, it is to be noticed here, that there is another, a SECOND occasion of comparing things together, so as to ascertain ideas of relation ; viz. When we consider their origin or beginning, and see how other things stand in reference to that origin. And such ideas as are ascertained in this way, and are found to result, as it were, from creation and nature, are what are termed IDEAS OF NATURAL RELATIONS.

It seems to be particularly characteristick of those relations, which we have now in view, that they are perma-

nent ; meaning by the remark, that they are not altered and brought to an end by ordinary circumstances ; but, as they begin to exist at the moment of birth, will be found to terminate only with the life either of the subject of the relation or of the correlated person.

Such are the ideas of father, brother, son, nephew, &c.

Mr. Locke mentions the term, countrymen, that is, those, who were born in the same country or tract of ground, as belonging here.

§. 88. *Of ideas of instituted or conventional relations.*

THIRDLY ; There are relations, which do not result from the constitution of nature, but are the consequence of the various obligations and duties in civil society ; and these, therefore, may be called ideas of CONSTITUTED OR CONVENTIONAL RELATIONS.

Thus a GENERAL is one, who has the power to command an army, this power being delegated to him by virtue of certain provisions, entering originally into the terms of the civil compact.

AN ARMY is a collection or body of armed men, who are under obligations, by the terms of such civil compact, to obey one man.

A CITIZEN OR BURGHER is one, who has a right to the privileges of civil society in a certain place, that is to say, is the subject of some government, to the principles of whose organization he is supposed to have consented, and to have taken a part in it.

These relations may be distinguished from the natural relations in the preceding section, by the circumstance, that they are not permanent, but are dependent upon the will or agreement of men, and may terminate before the subjects of them have ceased to exist.

The general may cease to act in that capacity, since the government, who gave him his authority, may take it away again. The army may be disbanded, and the bonds of civil society may be broken loose, and its members go

back again into the unrestricted freedom of the state of nature.

It is not thus in natural relations. The father is a father, so long as the son lives, the son sustains the filial relation so long as the existence of the father, and, in all cases of this description, the relations do not terminate, until one of the correlated persons is no more.

§. 89. *Place is an idea of relation.*

We cannot conceive of any body having place or position, without comparing it with some other bodies. If, therefore, having two bodies fixed, or which maintain the same relative position, we can compare a third body with them, the third body can then be said to have place or position.

This may be illustrated by the chess-men, placed on the chess-board. We say, the men are in the same place, although the board may have been removed from one room to another. We use this language, because we consider the men only in relation to each other and the parts of the board, and not in relation to the rooms or parts of the room.

Hence we may clearly have an idea of the place or position of all the different parts of the universe, considered separately, because they may be compared with other parts.

But we are unable to form any idea of the place or position of the universe considered, as a whole, because we have then no other body, with which we can compare it.

§. 89. *Chronological dates involve ideas of relation.*

The independence of the North American colonies was declared, July 4th, 1776.

These expressions may be thus explained.

We assume the present year, 1826, as a given period and reckon back to the year, *one*, which coincides with the birth of our Saviour; then the year, 1776, expresses the

distance between these two extremes, viz. one, and eighteen hundred, twenty six. This seems to be all we learn, when we say, the Independence of the United States was declared at the period mentioned.

We mean the same thing, and convey the same idea, whether we say that the Saviour was born in the year, one, of the Christian era, or, in the year, 4004, from the creation of the world. But, in the first case, the year, 4004, expresses the distance between these two extremes, viz. the beginning of the world, and the present time ; while, in the second instance, the event itself forms the beginning of the series.

So that all dates appear to be properly classed under ideas of relation.

§. 90. *Cause and effect ideas of relation.*

CAUSE and EFFECT, which are nothing more than regular antecedents and consequents, as already repeatedly remarked, belong here. They certainly have a relation to each other, for we cannot conceive of a cause, if we exclude from the list of our ideas the correlative notion of effect, nor, on the other hand, do we call any thing an effect without a reference to some antecedent.

It would seem from an examination of the process of the mind, in regard to these ideas, that we derive our notion of effect from an observation of the changes, which take place in bodies around us. When any change has happened, we necessarily feel, as if something had been done, and we term it an effect, having a mental reference to something antecedent, as before mentioned. So that we have the idea of effect, in the first instance, by means of the senses ; and as we cannot have an idea of cause without its correlative, we may look upon this idea also as capable of being traced to the same source ; and both of them, when we notice their mutual dependence and connection, are to be considered as most naturally coming under the general class of relations.

§. 91. *Modes, substances, and relations resolvable into simple ideas.*

All our complex ideas, whether **MODES**, **SUBSTANCES**, or **RELATIONS**, may be traced back and resolved into simple ideas, although it may not be very obvious, in some instances, how this is to be done, or when we have arrived at the end of the analysis.

It seems in general to be more easy to ascertain what are the simple ideas, which enter into the formation of the two first classes, than of the third. But nothing, it must be confessed, is so much wanting as the patience necessary to go into a careful examination of our thoughts, in order to a successful result even in this last class.

When we say, that honey is sweeter than bread, or that iron is harder than wax, the words, **SWEETER** and **HARDER** express relations or relative ideas, but being analyzed, so far as we are able to, they clearly terminate in the simple ideas of sweetness and hardness.

When we say of any individual, whom we happen to see, that he is our friend or our enemy, words, which not only express relations, but are correlative to each other, what do we mean to say or imply in the use of such expressions, but this; viz.

(1) That he is a man, (2) That he exercises love or hatred, (3) That we are the subjects of it. And having made this general analysis of the terms, we are then to consider what the complex notion, expressed by the word, **MAN**, is made up of, to inquire also where the idea of **LOVE** or of **HATRED** is to be classed, and what is its origin, &c. And thus we shall in the end arrive at those ideas, which are termed simple.

At present no further remarks remain to be made by us on the subject of the origin of our ideas. As this Treatise is designed for beginners in the science, to be more particular might tend rather to discourage, than to lead them on in the path of knowledge; and yet, we trust, such a view of it has been taken, as will not only be deemed in general correct, but sufficiently extensive to satisfy a moderate curiosity.

We finish this chapter with a few practical remarks on furnishing our minds with ideas.

It was observed in the seventy ninth section, that a few *real* ideas are of more consequence than many chimerical ones, and let it to be admitted to be a just remark. But of such ideas, as are real, as are consistent, as are distinct, and ready at command, there cannot be too many, any more than a man can have an excess of truth or an exuberance of moral virtue.

§. 92. *The mind should be furnished with a store of ideas.*

As early as possible should the mind be furnished with a rich variety of thoughts. Although it be proper and oftentimes necessary, that persons should direct their attention more to some particular subject than others, yet he cannot be considered as possessed of a good education, who is not in some degree acquainted with many subjects.

Our acquisitions are not to be limited to the affairs of our own country, but we are to become acquainted with the history of other nations also; and while there is much to be learnt, that is modern, the records of antiquity are not to be neglected. We are to learn things both of a political and a religious kind, those, which have relation to the mechanick arts, the laws of nature, the intercourse of life, the principles of the mind, and on a variety of other subjects.

Some of the benefits of possessing a large fund of ideas, which are the elements or materials of our knowledge, are these.

(1) It enables us to take a wide, and, therefore, in general a more accurate view of subjects.

In regard to every science there are some things true and some things false, and we are constantly liable to error; it may, therefore, well be expected, that he, who has a large store of ideas in that science, which he can examine and compare together, stands so much the better

chance of having his sentiments well balanced and correct.

A person, designing to pursue the study of law or of theology, may be of the opinion, that a knowledge of chymistry, of natural philosophy, or of the physiology of the human sytem, may be of no advantage to him, as a lawyer, theologian, &c., but there are many things, it may be replied, even if we admit the propriety of this opinion, the knowledge of which may not be so particularly beneficial in one's chosen pursuit, but of which, nevertheless, it would be highly discreditable to be ignorant.

Moreover, a lawyer, who is quite familiar with the principles of his particular department, may sometimes find himself a little perplexed, even when debating in a court of justice, in consequence of his ignorance of the chymical art, and a judge has been known to be confused, in making up a decision on a case of suspected murder, for want of a more intimate acquaintance with the philosophy of our animal organization.

(2) There is a second advantage, resulting from this enlarged and general acquaintance with things, viz. It will help, on the one hand, to preserve us from an excess of credulity or too readily believing every thing, which is proposed to us for our assent, and, on the other, will be likely to guard us from a positive and, dogmatical turn of mind.

There are many things, which at first sight appeared strange and incredible, but were afterwards found by us to be true. The more extensive the range of our ideas, the more shall we have found of instances of this sort. Hence when any thing is stated, however strange it may at first appear, we shall not be disposed to affirm or deny in respect to it with dogmatism, but to inquire further.

The more we know also in general, the more we shall, consequently, know, in particular, of intentional deceptions, and of the various unavoidable causes of mistake, and shall thus be strengthened against the indulgence of an extreme credulity.

These are advantages, which are not to be lightly prized, and are a sufficient reason, why we should early at-

tempt to furnish ourselves with many ideas on a variety of subjects, by our personal observation of what things take place around us, by reading judicious books, and by conversation.

One fruitful source of ideas is conversation. We may learn something even in conversing with those persons, who have not had the advantages of a liberal education, and whose time is perhaps chiefly taken up in the exercise of some mechanick art, or in manual labour in the cultivation of the soil.

It is to be remarked further, that we are not to despise the conversation of those, who are of slow utterance, and whose conversation is thought to be rather uninteresting. It is a remark of Dean Swift, which has some philosophy in it, that the common fluency of speech in many persons is owing to a scarcity of words and ideas. For whoever, as he reasons on the subject, is master of language and has a mind full of ideas, will be apt, in speaking, to hesitate upon the choice of both. Whereas common speakers have only one set of ideas and one set of words to clothe them in, and these are always ready. It is something like people coming fast out of a church, when it is nearly empty, but slow when there is a large crowd.

NOTE. In passing from the origin of our ideas to the subject treated of in the next chapter, we have only to say, that we follow an order in the discussion, which naturally suggests itself. We do not mean to assert, that the arrangement will appear perfectly natural to every one at first sight, although it will be likely to, on a little examination.

Having spoken of the origin of our ideas, which are the materials, about which the mind employs itself, it surely comes in course to examine those states of mind, where there is supposed to be a real perception of external objects, but is not; and which, therefore, are a species of false or illusive ideas, not resulting from the natural operations of the intellect, and not furnishing grounds of knowledge.

CHAPTER NINTH.

OF APPARITIONS.

§. 93. *What we are to understand by apparitions.*

Angels have appeared on earth. The Almighty has permitted it, as one means of forwarding the Scripture revelation, so necessary to mankind ; also other preternatural appearances in connection with the same great object.

It is hardly necessary to mention, among other instances, the appearance of the angel to Manoah and his wife, the sudden arrival of one of the same class of beings to release Peter from prison, and the circumstances of the Transfiguration.

As the canon of Scripture has long been closed, and the days of miracles are over, it does not rightly fall to us to consider the cases, to which we have alluded, and, further, they do not properly come under the head of APPARITIONS, since they were not merely imagined appearances, but real.

Apparitions are appearances, which seem to be real, but which exist only in the imagination.

There may be apparitions, then, of departed spirits, of angels, of celestial cities, of landscapes, of mountains and precipices, of festivals, triumphs, funeral processions, temples. There may be apparitions of all things, which exist, and of some things which do not exist.

We may imagine, that we see such things, as have been mentioned, and others, and firmly believe, that they are before us, or that we are in the midst of them, and all of it be merely a mental deception.

§. 94. *Of the connection between the mind and body.*

All apparitions, it may be said with safety, are owing

either to a permanently disordered state of the mind, or to some unnatural, temporary excitement; but mental diseases is a subject full of difficulty. Whether the immaterial principle have diseases of itself and peculiarly its own, independently of its connection with the body, or whether all its disorders may be traced to that connection, is a point, on which, in the present, limited state of our knowledge on this subject, it would be presumption to offer any positive opinion.

But whether all our intellectual derangements can be traced to the connection, existing between the mind and body, or not, it is very certain, that this is the case with very many of them. A few well known facts will help to illustrate the influence of the body over the mind.

(1) Old age may be considered as a disease, and the effects on the mind go, step and step, with those on the body. The mental vigour in those, who are experiencing the decrepitudes of age, is in most cases evidently impaired. The intellectual is hardly less deaf and blind, and stands hardly less in need of crutches to support it, than the bodily system.

(2) Violent, corporeal diseases in manhood, before any decays take place from age, often affect the powers of thought. Persons have been known after a violent fever or violent attacks of any other kind, to lose entirely the power of recollection; a circumstance to be remarked upon in the chapter on memory.

(3) Many things of a stimulating nature, when taken into the system, do in some way violently affect the mind. This is in particular true of the nitrous oxide gas;—when it is inhaled in a considerable quantity, the conceptions are more vivid, associated trains of thought are of increased rapidity, and emotions are excited, corresponding to the acuteness of sensations and the vividness of ideas.

(4) In general, whenever the physical condition of the brain, which is a prominent organ in the process of perception, is affected, whether it be from a more than common fulness of the blood vessels, or from other causes,

the mind itself will be found to be affected also ; and oftentimes in a high degree.

Facts of this description will help us, in some measure, in the explanation of those states of the mind, which are called APPARITIONS ; but with whatever light may be derived from this source, the whole subject still remains in some obscurity and open to many further inquiries.

§. 95. *This subject illustrated from Shakespeare.*

The definition, which we give of apparitions, is, that they are appearances, which seem to be real, but which exist only in the imagination. But how does it happen, that they are merely imaginary, when they have so much the appearance of reality ? The answer is, that they are ideas or conceptions, in no ways differing from ordinary conceptions but this, that they are more vivid ; and it is in consequence of being so much more vivid than common, that the conceptions are mistaken for the thing conceived of, a state of the mind, which is brought about on the principles of association, for the real object, which was originally the cause of that state of mind. The conception of the man, of the mountain, the temple, or the procession, is so intense, so extremely vivid, that we as firmly believe them to be really in our view, as when at some former period we truly beheld them.

In many cases, this great intensity and vividness of conceptions may be traced to some affection of the bodily system, as has already been intimated ; when, for instance, a person has inhaled a quantity of nitrous oxide gas, when there is a general strong excitement of the nervous system, or when it so happens, that the blood vessels of the brain are overcharged. There are, however, some instances of apparitions, which baffle the efforts of any solution of this sort.

Few persons have exhibited a more intimate acquaintance with the principles of the mental constitution, than Shakespeare. He was not ignorant of the fact, that the human mind, under certain circumstances, is in such a po-

sition, that imaginary appearances impress it as strongly, and seem to be as truly and really before it, as any objects whatever, which are actually beheld by us.

Thus, when Macbeth is preparing to slay Duncan, he beholds the apparition of a dagger.

"Is this a dagger, which I see before me,

"The handle towards my hand? Come, let me clutch thee,

"I have thee not, and yet I see thee still.

It was not true, that Macbeth saw any thing, although, if he had clutched the dagger in his hand, he would not have believed more firmly in its existence and presence, than he did.

From this tragedy and also from others, we have evidence of what has been stated,

(1) That Shakespeare believed and knew, that there are APPARITIONS or mental conceptions so vivid, as to be mistaken for realities;

(2) And also that he considered apparitions to be owing to a disordered state of the mind, whatever might be the cause of that mental derangement, whether bodily or in the mind itself.

In the present instance, he seems to me obscurely to intimate an opinion, that the APPARITION was to be ascribed to an inordinate determination of the blood to the brain;

"A dagger of the mind, a false creation

"Proceeding from the heat-oppressed brain.

§. 96. *Appearance of Caesar's ghost to Brutus.*

Before the last battle on the plains of Philippi, a spectre somewhat larger, but not less distinct than the life, appeared to Marcus Junius Brutus;—the same spectre is said to have appeared to him once before. This incident, which is related by the early biographers of the patriotick Roman, is more recently taken notice of by Shakespeare also, in the play of Julius Caesar; he takes the liberty of a poet, however, in placing it before the death of Cassius.

Brutus is represented, as sitting in his tent late at night, and the only one awake. He is just taking up a book to read, when Caesar's unwelcome spirit enters.

"How ill this taper burns! Ha! Who comes here?"

"I think it is the weakness of mine eyes,

"That shapes this monstrous apparition.

"It comes upon me;—Art thou any thing?"

"Art thou some god, some angel, or some devil?"

The English dramatist well knew, whether the historical account of the incident were true or false, there was nothing impossible and perhaps not improbable in the circumstance, that Brutus should have been under the influence of that mental delusion, which is termed APPARITION; and have thus been led firmly to believe in the presence of the spectre.

In explanation of the spectre, which appeared to Brutus, there is to be considered,

(1) His bodily fatigue. Oppressed as he was with the principal cares of the army, we may well suppose, that his bodily system was in a measure worn down, and in such an unsettled and feverish state, as to detract not inconsiderably from the due and consistent exercise of the intellectual faculties.

(2) It is only a natural supposition also, that he was in great mental excitement, independent of any intellectual derangement arising from his great fatigue; foreseeing the misery, which would come upon himself, if he were defeated, on his family, and the whole Roman people, and remembering, in particular, that he had plunged the dagger into the bosom of his friend for freedom, and that the freedom, which he had thus sought, was likely to be lost.

Thus there was combined, with an over-wearied and feverish condition of the bodily system and the natural effects on the mind arising from this source, a strong and fearful mental agitation from other causes; and then it is to be remembered also;

(3) That, in the instance of which we are now speaking, it was the night before the battle, it was in its depth of stillness and darkness, and his lamp was burning dimly beside him.

These circumstances, although we do not pretend to offer them as a full solution, justify us in the opinion, not that he had a dream, which some have supposed, but that his waking conception of the dead Caesar was so vivid, as to lead him to mistake the image for the reality.

It will be deemed pardonable, if I pass from this instance of antiquity, briefly to comment on a remark, which is to be found in one of those interesting little narratives, which detail the sufferings of the early settlers in our country when taken captive in the Indian wars. I allude to the narrative of the captivity of a Mrs. Howe and her seven children, who in 1775 were taken prisoners at Hinsdale in New Hampshire by a party of the St. Francois Indians. Once coming into the company of a number of savages, after having been absent from them some little time, she saw them smile at each other, and asked what was the matter? They replied, two of her children were no more, one having died a natural death, and the other being knocked on the head. "I did not utter many words, (says the mother,) but my heart was sorely pained within me, and my mind exceedingly troubled with strange and awful ideas. I often imagined for instance, that I plainly saw the naked carcasses of my children hanging upon the limbs of trees, as the Indians are wont to hang the raw hides of those beasts, which they take in hunting," &c.

It needs but a little reflection to assure one, that these conceptions or ideas were of that intensely vivid kind, which are here denominated *apparitions*, the mind being thrown into an unnatural and feverish posture by the great degree of mental and bodily suffering.

NOTE. The remarks in relation to Caesar's spectre may be applied also in explanation of the appearance of Banquo's ghost in the tragedy of Macbeth.

§. 96. *Confessions of an English opium-eater.*

There is a book entitled CONFESSIONS OF AN ENGLISH OPIUM-EATER; not without merit in point of style, but chiefly valuable for affording some facts in respect to the

mind. This person seems to have been naturally of a feeling and imaginative turn, and this intellectual vivacity was greatly increased by an inordinate use of opium ; so that in the end his intellect was thrown into an unnatural and disorderly posture. In the middle of eighteen hundred and seventeen, the faculty of forming apparitions, that is, as the terms are to be understood in his case, the power of painting all sorts of phantoms on the darkness, became so frequent and effective, as to be positively distressing to him. At night when he lay awake in bed, vast processions passed along in mournful pomp ; friezes of never-ending stories, that to his feelings were sad and solemn, he informs us, as if they were stories drawn from times before Oedipus or Priam, before Tyre, before Memphis. Whenever the night shades had fallen, whatever he happened to think upon, whether it were landscapes, or palaces, or armies in battle array, in a word, whatever was a subject of thought, and was capable of being visually represented, formed themselves into phantoms of the eye and swept before him in order and in distinctness, no less marked and imposing, than if the real objects themselves had been present.

This was a state of mind, without doubt, in many respects, similar to that which framed the spectre of Cæsar, the imaginary sword of Macbeth, and suspended before the bewildered sight of the American captive the bodies of her lifeless children.

§. 97. *Of temporary mental excitements.*

Very much resembling the states of mind, which have been mentioned, and differing in degree rather than in any other respect, are certain temporary mental excitements, to which literary men, especially those of a vivid and powerful genius, have been too much subject.

The late lamented Professor Fisher of New-Haven has made a statement on this point, drawn from his own experience, as follows ;

“To whatever subject I happened to direct my thoughts,

my mind was crowded with ideas upon it. I seemed to myself able to wield the most difficult subjects with perfect ease, and to have an entire command over my own train of thought. I found myself wonderfully inventive ; scarce a subject presented itself, in which I did not seem to myself to perceive, as it were by intuition, important improvements. I slept but a part of the night, my mind being intensely occupied with planning, inventing, &c. All the writing that I did was done in the utmost hurry. Ideas crowded upon me five times as fast as I could put down even hints of them, and my sole object was to have some memorial by which they might be recalled. I was employed the whole time in the most intense meditation ; at the same time, thinking never seemed to me to be attended with so little effort. I did not experience the least confusion or fatigue of mind. My thoughts flowed with a rapidity that was prodigious, and the faculties of association, memory, &c. were wonderfully raised. I could read different languages into English, and English into Hebrew, with a fluency which I was never before or since master of. During the whole time, though I was in a low state of health, I never felt the least pain or fatigue of body."

Instances of this sort are not unfrequent, but we have selected from many others, that which has been given, as coming from a source entitled to more than ordinary credit.

On these temporary mental excitements the following remarks are suggested ;

(1) They are not the action of a healthy and well-balanced state of mind, but are rather indicative that it is diseased, and happen in consequence of such disease. They are sometimes accounted moments of inspiration, but it would be happier for the subject of them, if he were led to regard them, as seasons of intellectual malady.

(2) They are generally followed by a depression, which corresponds to the more than ordinary, previous excitement. That energy of conception and strength of combination, which a little while before were perhaps recog-

nised with emotions of pride, are followed by extreme prostration and inertness ;—so that, if it could be proved, that the previous state of the mind were not a diseased one, no benefit could justly be considered, as having resulted from its occurrence.

It is of great practical consequence to many, especially to persons of studious habits, to pay attention to these remarks. If they find themselves the subjects of such mental excitements, as have been described, they will be led to regard them, if they consider these views well founded, as the indications of mental disease. They should, therefore, seek some remedy. The influence of the body over the mind, as already seen, is very great, and the unnatural exercises of the mind may, in this very instance, be traced to the connection, existing between them. If this should be found to be true, the first thing to be attended to, would be a restoration of the physical system.

It may be briefly remarked in this connection, that, in general, a healthy and vigorous state of the body is necessary to a healthy and vigorous mental action.

§. 98. *State of the mind in drowning.*

It has been remarked, in a number of instances, by persons, who have been on the point of drowning, but have been rescued from that situation and have survived, that the operations of their minds were peculiarly quickened. There was such wonderful activity of the mental principle, that the whole past life, with its thousand, minute incidents, has simultaneously passed before them, and been viewed, as in a mirror. Scenes, and situations, long gone by, and associates, not seen for years and perhaps buried, came rushing in upon the field of intellectual vision, in all the activity and distinctness of real existence.

In a moment of time, when the soul was on the point of starting away from the body forever, millions of actions, millions of thoughts, uncounted multitudes of feelings have, in this way, appeared to pass in review.

In how many instances, compared with the whole num-

ber of persons rescued from the waters, when on the point of yielding up their life, this peculiar state of mind may have existed, it is not in our power to say;—that it has existed in some cases of this sort there is no doubt.

Here, then, is an instance of greatly increased mental action, in some respects analagous, undoubtedly, to other instances, brought up in this chapter, but of which our information is as yet too limited and conjectural, to furnish a satisfactory solution.

A remark may be made here in reference to the final judgment. The doctrine of the Scriptures on that most interesting subject, is, that we shall be judged, and the retribution will be awarded according to the deeds done in the body, whether good or evil. But it is difficult for us to harbour the belief, that God will pass judgment on his creatures, and they not be enabled clearly to understand the rectitude of his decisions. And still less easy is it for us to conceive, how there can thus be a conviction of his rectitude without a distinct recollection of the actions of the past life.

The fact, which has now been mentioned, and others, which are related in different parts of this chapter, do not permit us to doubt, that it is in the power of our Creator to quicken our mental capabilities, without the laws, which ordinarily govern them, being, in the least, altered from their present state, so that the numberless multitude, assembled at the judgment seat, shall, in a single instant, view the perfect PANORAMA of their past life, in all the variety and in all the minuteness of its circumstances.

This remark is worthy the consideration of those, who object to a general judgment on the ground, that the actions of the past life cannot possibly be recalled, in all their extent, to the person, who has committed them.

§. 99. *Of the apparitions of Nicolai.*

Nicolai was an inhabitant of Berlin, a celebrated bookseller, of a naturally very vivid imagination. He was neither ignorant nor superstitious; a fact, which some un-

doubtedly will esteem it important to know. The following account of the apparitions, which appeared to him, is given in his own words.

"My wife and another person came into my apartment in the morning, in order to console me, but I was too much agitated by a series of incidents, which had most powerfully affected my moral feeling, to be capable of attending to them. On a sudden, I perceived, at about the distance of ten steps, a form like that of a deceased person. I pointed at it, asking my wife if she did not see it? It was but natural that she should not see any thing; my question, therefore, alarmed her very much, and she immediately sent for a physician. The phantom continued about eight minutes. I grew at length more calm, and being extremely exhausted, fell into a restless sleep, which lasted about half an hour. The physician ascribed the apparition to a violent mental emotion, and hoped there would be no return; but the violent agitation of my mind had in some way disordered my nerves, and produced further consequences which deserve a more minute description.

"At four in the afternoon, the form which I had seen in the morning re-appeared. I was by myself when this happened, and being rather uneasy at the incident, went to my wife's apartment, but there likewise I was persecuted by the apparition, which, however, at intervals disappeared, and always presented itself in a standing posture. About six o'clock there appeared also several walking figures, which had no connection with the first. After the first day the form of the deceased person no more appeared, but its place was supplied with many other phantasms, sometimes representing acquaintances, but mostly strangers; those whom I knew were composed of living and deceased persons, but the number of the latter was comparatively small. I observed the persons with whom I daily conversed did not appear as phantasms, these representing chiefly persons who lived at some distance from me.

"These phantasms seemed equally clear and distinct at all times, and under all circumstances, both when I was by myself, and when I was in company, and as well in the day as

at night, and in my own house as well as abroad ; they were, however, less frequent when I was in the house of a friend, and rarely appeared to me in the street. When I shut my eyes, these phantasms would sometimes vanish entirely, though there were instances when I beheld them with my eyes closed, yet, when they disappeared on such occasions, they generally returned when I opened my eyes. I conversed sometimes with my physician and my wife of the phantasms which at the moment surrounded me ; they appeared more frequently walking than at rest, nor were they constantly present. They frequently did not come for some time, but always re-appeared for a longer or shorter period, either singly or in company, the latter, however, being most frequently the case. I generally saw human forms of both sexes, but they usually seemed not to take the smallest notice of each other, moving as in a market-place, where all are eager to press through the crowd ; at times, however, they seemed to be transacting business with each other. I also saw several times people on horse-back, dogs and birds. All these phantasms appeared to me in their natural size, and as distinct as if alive, exhibiting different shades of carnation in the uncovered parts, as well as different colours and fashions in their dresses, though the colours seemed somewhat paler than in real nature. None of the figures appeared particularly terrible, comical, or disgusting, most of them being of an indifferent shape, and some presenting a pleasing aspect. The longer these phantoms continued to visit me, the more frequently did they return, while, at the same time, they increased in number about four weeks after they had first appeared. I also began to hear them talk ; these phantoms sometimes conversed among themselves, but more frequently addressed their discourse to me ; their speeches were commonly short, and never of an unpleasant turn. At different times there appeared to me both dear and sensible friends of both sexes, whose addresses tended to appease my grief, which had not yet wholly subsided : their consolatory speeches were in general addressed to me when I was alone. Sometimes, however, I was accosted

by these consoling friends while I was engaged in company, and not unfrequently while real persons were speaking to me. These consolatory addresses consisted sometimes of abrupt phrases, and at other times they were regularly executed."

As Nicolai was a person of information and of a philosophick spirit, he was able to detect and to assign the true cause of his mental malady.

He was, it is to be remembered, in the first place, a person of a very vivid fancy, and, hence, his mind was the more likely to be affected by any disease of the body. A number of years before the occurrences above related, he had been subject to a violent vertigo, which had been cured by means of leeches; it was his custom to lose blood twice a year, but previously to the present attack, this evacuation had been neglected. Supposing, therefore, that the mental disorder might arise from an irregularity in the circulation of the blood, he again resorted to the application of leeches.

When the leeches were applied, no person was with him besides the surgeon; but during the operation his chamber was crowded with human phantasms of all descriptions. In the course of a few hours, however, they moved around the chamber more slowly; their colour began to fade, until growing more and more obscure, they at last dissolved into air, and he ceased to be troubled with them afterwards.

§. 100. *Instance similar to the preceding.*

There is an instance, very similar to that of Nicolai, in the sixth volume of the Edinburgh Medical and Surgical Journal; particulars, however, it is unnecessary minutely to repeat.

A shopkeeper of Edinburgh was haunted with apparitions, appearing not only at night, but in the day time; so much so that, at one time, he was unable to tell which were his real customers, and which were phantoms of the imagination.

The visionary beings, that appeared to him to enter

and leave his shop, were as distinctly marked, were apparently as full of life and intelligence, as the persons, who were really present.

The complaint in this instance was cured by medical prescriptions, in particular, as in the case of the Berlin bookseller, by letting of blood by means of leeches.

For other instances the reader is referred to a popular work recently published, entitled,

"Sketches of the Philosophy of Apparitions; or, an Attempt to trace such Illusions to their Physical Causes by Samuel Hibbert, M. D."

The author treats of spectral illusions, resulting from highly excited states of particular temperament, from a general nervous irritability of the system, from hystericks, from neglect of accustomed, periodical blood-letting, from febrile and inflammatory affections, hypochondriasis, &c.

It is sufficiently clear from this work, that, in many cases of apparitions, the cause is undoubtedly to be sought, as in the instances, which have been last mentioned, in the disordered condition of the bodily system; the consequence of which is a disordered state of the mind.

§. 101. *Of the second sight of the Scotch Highlanders.*

Much has been said, although more formerly than in latter days, of the SECOND SIGHT of the Highlanders in Scotland; a faculty, called, in the Erse language, *Taisch*;—and if it be considered a subject at all worthy of attention, it is proper to remark upon it, in connection with the ideas brought up in this chapter.

SECOND SIGHT is the power of visually beholding objects, which are not present, and which, therefore, are not naturally and in the ordinary way, objects of vision.

Take the following illustrations. A man on his journey, and far from home, is thrown from his horse; a person, who is his neighbour, but has the power of second sight, sees him bleeding on the ground, although at the distance of a considerable number of miles, and, it may be,

not without a perception, more or less vivid, of the outlines of the place, where the accident happened. Again; a person, having this power, may be expected at some fit time to see a funeral procession, with such attendant circumstances, as are judged to point out some individual in the neighbourhood, whose lot it will be soon to leave the world.

Perceptions of this sort are not limited to any particular objects, but all things existing and all states of action and suffering may be thus seen, and such consequences are deduced and predicted, as the circumstances of the particular case seem to warrant.

There was a treatise on this subject, published in the year 1762, in which many incidents were related of persons, whom the writer believed to have possessed this extraordinary power, but the incautious credulity, which he manifested, was such, as to prevent implicit confidence being placed in his details.

After looking at the subject with the aid of such statements as have reached these regions so remote from the soil, where this power is supposed to have been peculiarly exercised, this seems to be a reasonable result, viz.

That the Highlanders of Scotland possessed, and undoubtedly do still possess, the second sight, which is more or less prevalent in all countries, and nothing more;—viz. that of APPARITIONS, or, in other words, of conceptions, rendered so vivid by circumstances, either mental, physical, or a combination of both, as to appear realities.

There may be reason, however, for supposing, that apparitions were more frequent among them, than is common elsewhere, but we are able to allude, and that briefly, only to one of the circumstances, which are considered as justifying the supposition.

It has been remarked with truth, that the high-lands of Scotland are a picturesque, but a melancholy country. The narrow vallies are but thinly inhabited; they resound with waterfalls and are overhung with precipices; and further upward are mountainous deserts, covered with the brown heath and dark with mists.

People, inhabiting such a land, will be likely to have strong and lofty feelings, apparently partaking of the wildness and darkness of their situation. If they are ignorant they can hardly fail to be superstitious, as strength of feeling, when not guided by information, has been found very generally to incline that way;—and if they are too well informed, for superstition, they will discover an inclination to melancholy, superinduced, as one may say, by the gloomy, but exalting sublimity of those works of nature, which constantly surround them.

Their conceptions, therefore, will be extremely vivid; and it will excite no wonder, if a larger number of persons, than is common in less romantick countries, should be found, whose conceptions are so strongly aroused, as to become APPARITIONS.

§. 102. *Of ghosts and other spectral appearances.*

GHOSTS are partly APPARITIONS, taking that term, as it has been illustrated, and in part mental illusions, arising from not viewing objects aright. In respect to ghosts, remark,

(1) That they are seen most frequently in the dark, hardly any one pretending to have seen them in the day time. And this is a circumstance altogether in favour of the idea, that they are in all cases, although they cannot all be referred to one cause, deceptions practised on the imagination. In the dark, as we are exposed to a greater variety of dangers than at other times, our feelings are in consequence excited in a greater or less degree, and, as there is a great dimness in the outlines of objects, they readily assume, when viewed by the mind under such circumstances, new and various shapes.

Let it be observed, as another circumstance attending these spectral appearances,

(2) That ghosts are seen most frequently among people of very little mental cultivation, among the ignorant. Uninstructed minds are generally the most credulous. If there were truly any beings in nature of this sort, and they

were any thing more than imaginary appearances, persons who were well-informed and philosophick, would stand a chance, equally good with others, of forming an acquaintance with them.

From these two circumstances it seems to follow clearly, that many of these imaginary beings are the creations of a credulous and excited mind, viewing objects at an hour, when their outlines cannot be distinctly seen.

It is to be remarked further,

(3) Ghosts, whenever they present themselves, are found to agree very nearly with certain previous conceptions, which persons have formed in respect to them. If, for instance, the ghost be the spirit of one, with whom we have been particularly acquainted, he appears with the same lineaments, although a little paler, and the same dress even to the button on his coat; the dress, in general, however, is white, corresponding to the colour of the burial habiliments;—so that they may be said to have a personal or individual, a generick, and, as some have maintained, a national character.

“They commonly appear, (says Grose, who has written on this subject,) in the same dress, they wore while living; though they are sometimes clothed all in white; but that is chiefly the churchyard ghosts, who have no particular business, but seem to appear *PRO BONO PUBLICO*, or to scare drunken rusticks from tumbling over their graves. Dragging chains is not the fashion of English ghosts, chains and black vestments being chiefly the accoutrements of foreign spectres seen in arbitrary governments;—Dead or alive, English spirits are free.”

This circumstance also remains to be considered;

(4) When spirits have come from the dead to the living, it has generally been found, that these visitants were among the particular friends, although sometimes of the enemies of those, whom they came to see. This is very natural.

It is our friends and enemies, whom we think most of; much more than of those, to whom we are unknown, and towards whom our feelings are indifferent.

A person has lost a very near friend by death ; his soul is distressed, and amid the joys of life, which have now lost their charms, and amid its cares, to which he turns with a broken heart, he incessantly recalls the image so endeared to him. What wonder then, that his imagination, which, in the light and bustle of the day, was able to keep before itself the picture of the departed, should, in the stillness and shades of midnight, when remembrances multiply and feelings grow deeper and deeper, increase that picture to the size and give to it the vivid form of real life !

These circumstances justify us in ascribing the existence of that supposed class of beings, called ghosts, to the two causes, mentioned at the head of this section, viz. conceptions rendered inordinately intense, and objects, actually seen, but under such circumstances, as to be misrepresented.

§. 103. *Of the apparitions of the religious.*

Individuals, under great religious excitement, frequently make mention of having seen apparitions. One has beheld angels, ascending to heaven, or descending on the ladder of Jacob ; bright companies, singing the song of Moses and the Lamb ; and the river of the water of life, clear as chrystal.

Another has seen the Saviour in the most trying moments of the crucifixion ; and has no more doubt of having truly and visually beheld Him, than the disciple, Thomas, when he thrust his hand into his side.

This subject, is one of a delicate nature, and on which we are greatly liable to be misunderstood. Knowing this, we shall decline either asserting or denying, that christians may see, and have seen angels, heaven opened, the Saviour, and the like ; since any thing we have in view, in the present section, does not require such assertion or denial.

But this proposition may probably be laid down without exciting opposition from any quarter ;—That it is dan-

gerous to rest one's hopes of a religious character on these visions. And without rudely setting at defiance the feelings and opinions, existing on this subject, we would inquire, Whether they cannot very often, as in instances already remarked upon, be traced to some disorder of the physical system? or, admitting, that the body is sound and under no special excitement, whether they may not be merely our own thoughts, strengthened by reflection, rendered intense by desire?

"Alas! we listen to our own fond hopes,
 "Even till they seem no more our fancy's children,
 "We put them on a prophet's robe. endow them
 "With prophet's voices, and then Heaven speaks in them,
 "And that, which we would have be, surely shall be."

The salvation of the soul is too weighty a concern to be risked on such an uncertain foundation; especially as we have the Word of life, which points out the marks of a gracious state, yet without making mention of dreams, visions, or apparitions, as included among those marks.

NOTE. In the *London Quarterly* of April, 1822, in an article on Nervous Affections, are some remarks on Emanuel Swedenborg. Whether they be philosophical and just, or not, the reader can judge;—they are, at least, written with more temper and candour, than some of the criticisms on the life and writings of the individual, who is the subject of them.

"We have been looking over the life and writings of Emanuel Swedenborg, and the conclusion to which we come is this:—that if allowance is made, first, for a credulous and fanciful intellect, (there is among sane men an infinite variety in the susceptibility of belief,) and, secondly, for the use of allegorical instead of common language—if we had him alive, could catechise and cross-examine him about his statements, separate what was mere allegorical jargon, and what was mere matter of opinion, and get his actual experiences in plain language, much, if not all the mystery would vanish, without resorting to insanity for an explanation. In the present age, philosophers credit nothing but what they perceive by sense, receive on satisfac-

tory evidence, or infer by strict reason ; all notions, suggested by other impulses, they view with doubt or disbelief. Wieland, in his *Agathodamon*, conjectures, that in the infancy of the human race, men did, as children do now, confound their past dreams with real occurrences ; that when they had been dreaming of a dead friend, they would think that they had been with him, and that thus has arisen the belief in ghosts. Berkeley was of opinion that the reality of things consisted not in their outward existence, but in being perceived. It is a common belief with religious enthusiasts that strong inclination is divine impulse. Now if from natural facility of conviction, or from religious hypothesis, Swendenborg believed that meditation carried to a certain intensity was reality, how easy for him to sit in his arm-chair, shoot his soul into Heaven ; wander through its streets and squares ; behold its lofty buildings and splendid palaces, roofed with gold and floored with precious stones, converse with its inhabitants dressed in white, or shining, or flame coloured garments, and walk under trees with silver leaves, golden fruit, and rainbow flowers !”

CHAPTER TENTH.

ORIGIN OF SIGNS OF THOUGHT.

§. 104. *Our mental operations are to be made known.*

It seems to be clearly the intention of Providence, that there should be a communication of thoughts from one to another. Without such an ability of making our thoughts known, there would be but little force in the remark of one of the philosophick ancients, the truth of which is so generally granted, that we are born not for ourselves alone, but that our friends and country have a share in us.

There is, then, some way of reciprocal intercourse among the souls of men ; hearts can meet each other in the

salutations of friendship ; minds can grapple in the trial of their strength ; there are desires and aversions to be made known, hopes and fears, doubts and determinations, perceptions, imaginations, reasonings.

Admitting the truth of this representation, the mode of communicating these things, as well as the various thoughts and feelings themselves, becomes an interesting subject of inquiry. It is interesting, because the signs of thought, whatever they may be, exercise a considerable influence over those mental operations, of which they are representative, and also because it is of the utmost consequence to the well-being and prosperity of mankind, that there should be as much readiness and exactness as possible in those mental communications, which by means of signs are constantly taking place.

In this chapter, however, we are to inquire particularly into signs of thought, where alphabetick characters and oral speech may be supposed to be unknown, to observe upon that way of making communications, which was earliest used and upon others, as they successively follow ; reserving to the following chapter a variety of speculative and practical remarks on the use of words, which is the sign or representative of thought, with which, at the present day, we have most to do.

§. 105. *Thoughts first expressed by gestures and the countenance.*

Separate an individual in very early life from the rest of the human family, and let him grow up without any instruction in the use of the organs of speech, and it will be found, that he will be entirely ignorant in what way to employ them, except it be to utter a few inarticulate cries.

The story of the wild girl, found near the French village of Songi in 1731, also of a boy, found in the forests of Lithuania in 1695, who is particularly mentioned in Part First of Condillac's book on the Origin of Knowledge, and other instances similar, are a proof of what has been said.

Whether God did, or did not, directly teach our first

parents alphabetical, oral language, (a question, which has been long disputed,) it is certain, that, in these instances, we find persons, who could not avail themselves of that mode of communicating their ideas ;—the same is true of persons, who are born deaf and dumb, and have not been instructed in any artificial method of making their thoughts known. Such persons, not being able to express their ideas by means of arbitrary signs, avail themselves, to the best of their power, of the language of nature.

And now the question is, when they are thus limited, what is the means, which they first employ ? The answer, in reference to such an inquiry, is, that they make use of gestures and expressions of the countenance.

The following illustrations may be given.

The flushed countenance and the uplifted hand denote an emotion of rage within ;—a look, slightly illuminated with a smile, with none or but a small motion of the body, is an indication of satisfaction and peace. In dejection and melancholy, the head sinks, the arms depend ; while admiration and surprise elevate the arms, throw the body back, and fix it, seemingly immovable, in one position.

Two savages of different tribes accidentally meet together, totally unacquainted with each other's language ;—they are hungry, or athirst, or wounded in battle, or from some other cause in suffering. By means of such gestures merely and such expressions of countenance, as have been mentioned, how many thoughts and feelings will they be able reciprocally to communicate !

§. 106. *Of the art of Pantomime among the Romans.*

IN PANTOMIME thoughts are exhibited by gesture and the countenance merely, without words. The Romans had three collections of gestures, one for tragedy, another for comedy, and a third for those satirical poems, which were thought to be suited for publick exhibitions. There were actors in pantomime, such as Pylades and Bathylus, who made it their whole business to address the people

in this sort of dumb show, and they succeeded to a degree, which at the present day is quite astonishing.

It was before systems of gestures were fully agreed upon, as signs of thought, and pantomime had gotten to be an art, that the contest between Cicero and Roscius, which has been so often mentioned, took place. Cicero pronounced a period, which he had composed; Roscius followed and gave the meaning in action; Cicero varied his expressions, and Roscius as readily varied his gestures. And whether Cicero with words could convey the meaning with more exactness and emphasis, than Roscius could without them, has been made a question.

It may be more particularly noticed here, that gesture is the natural language of the deaf and dumb. It was remarked by a person, that, in travelling in one of the United States, he once stopped at a house, where were three sisters, all deaf and dumb; two of them grown up, the other about six years of age. They had received no instruction, but they were, nevertheless, able to express very many ideas, far more than one might at first suppose, by means of action or gesture. But it was not merely that limited degree of action, which the violence of feeling seems instinctively and naturally to prompt; they had, in some way, agreed upon a numerous catalogue of signs of this sort, and employed them with remarkable expertness. They thus made out to converse with each other, and with those of their acquaintances, who had succeeded in learning their vocabulary of action.

Although the signs in this instance were in some measure conventional, because reciprocally agreed upon, they did not hit upon them of themselves, but they were suggested by what they observed in the daily employments of their fellow beings. For instance, a motion of the arm, slightly declining from the horizontal, was their sign for a scythe and for mowing. A motion, similar to that of a person cutting wood, was their sign for an axe and for cutting. Their sign for a book was the laying of the palms of the hands together and then opening them, as one opens a book, &c.

The earliest mode of expressing thoughts, then, was by gesture or action, and by expressions of the countenance.

§. 107. *Thoughts expressed by symbolick actions.*

The next mode of expressing thoughts, resorted to by those, who have not arbitrary signs, is symbolick action. This seems to be only the language of gesticulation, carried to a greater extent; and will, therefore, be most likely to be frequently employed among nations of little mental culture, and in oriental countries more frequently than in others, owing to the greater vivacity of the people. We, accordingly, find instances of this mode of expressing thought among all savage tribes, and those, who are familiar with the Bible, know, how very frequently it was employed among the Hebrews.

As far as uncivilized nations are concerned, it is well known, that, when a citizen of this country or of the Canadas makes a visit to an Indian tribe, with which his own people is not in a state of hostility, he is expected, and, in consequence of that expectation, deems it expedient, if not necessary, to carry in his hand a large pipe, formed of clay or marble, and adorned with feathers, which is called the calumet of peace. And this is a SYMBOL, more expressive to the savage mind, than would be the utterance of the same thing in words, that his visitant cherishes sentiments of amity and good will.

Further;—when any of the North American savages form a treaty with any other tribe or nation, they employ, as a symbol of certain feelings and determinations, the belt of wampum, composed of shells of different colours, but generally black and white, and wrought into the shape of beads. The beads are perforated and strung upon a thong, and several of these thongs, united together, constitute a belt. One party to the treaty holds one end of the belt, the other party holds the other;—a symbolical action, by which the savages understand the sincere and reciprocal confirmation of the stipulations of the treaty.

Such symbolick actions were frequent also, as intimated above, among the Hebrews. It will be enough, in illustration of this remark, merely to allude to the following instances, which may be more fully understood by a reference to the Scriptures.

Elisha directs Joash to shoot arrows out of a window eastward. Jeremiah, acting under divine direction, hides the linen girdle in the hole of a rock near Euphrates;—he breaks a potter's vessel in the sight of the people;—he puts on bonds and yokes, and casts a book into Euphrates. Ezekiel weighs his beard, delineates the siege of Jerusalem on a tile, &c.

§. 108. *Objections to the symbolick language of scripture.*

It has been sometimes thought, that the symbolick actions, mentioned in the preceding section, were below the dignity of the prophetick office. They have, indeed, by opposers of the Bible, been charged with nothing less than meanness, absurdity, fanaticism. A short-sighted conclusion this.

It ought to be remembered, that it was the spirit of the times, the feeling of the people themselves, which dictated those actions; and if with good reason we speak of the spirit of the age in regard to every generation of men, it is absurd and fanatical in us to set up the feelings and practices of our own period, to guide us in the estimation of the actions of individuals in all the ages preceding.

The people undoubtedly well understood the meaning, when Ezekiel weighed the hair of his beard in balances and delineated the siege of Jerusalem on a tile;—and the action was no more considered foolish and improper, than very many gesticulations are so considered by us, which we every day witness, without any sense of incongruity or any emotions of surprise.

§. 109. *Of pictorial delineations as signs of thought.*

We next consider those pictured delineations, which

are meant to convey ideas by means of visible sketches of actions and events precisely, as they exist. These delineations are made sometimes in painting, sometimes in embroidered work, and in other ways.

The expression of ideas in this method has been more or less practised in all nations during the early periods of their history, and has been of considerable aid to them in making out the record of their early annals. We are informed in the Pentateuch, that figures were embroidered in the curtains of the HOLY OF HOLIES; and learn from the ancient poems of Homer, that Helen wrought in embroidery the pictures of the battles, in which the ill-fated attractions of her own person had caused the Greeks and Romans to be engaged. We find some evidence of the existence of this mode of expressing and transmitting ideas among the Persians, Phenicians, Egyptians, Scandinavians, as well as among the Greeks and Hebrews;—although, as may well be supposed, when we ascend to a period so far back, as to have rendered this imperfect mode of expressing thoughts necessary, historical information becomes, in general, scanty and doubtful.

The expression of ideas by painting in colours, or by pictorial writing in other ways, was found to exist among the savages of North America. Bows and arrows, hatchets, animals of various kinds were imprinted on the bodies of their chiefs, the indications of their calling and of their heroick qualities.

A recent and somewhat striking illustration of this topick cannot well be omitted. In Schoolcraft's Journal of Travels through the north-western regions of the United States, we are told that the party, in passing across from the river St. Louis, to Sandy Lake, had, with their Indian attendants, gotten out of the way, and could not tell, where they were. In consequence of being in this situation, the Indians, not knowing what might be the result, determined to leave at a certain place, a memorial of their journey for the information of such of their tribe, as might happen to come in that direction afterwards. In the party there was a military officer, a person whom the

Indians understood to be an attorney, and a mineralogist ; eight were armed ; when they halted, they formed three encampments. The savages went to work and traced out with their knives upon a piece of birch bark a man with a sword for the officer, another human figure with a book in his hand for the lawyer, and a third with a hammer for the mineralogist ; three ascending columns of smoke denoted the three encampments, and eight muskets, the number of armed men, &c.

We find pictorial delineations to have been practised, in particular, among the original inhabitants of Mexico. It is related by historians, that when the Spaniards first landed upon that coast, the natives despatched messengers to the king, Montezuma, with a representation, painted on cloth, of the landing and appearance of the Europeans. The events and appearances, which they wished to describe, were new to them, and these pictured representations were the methods, which they adopted, in preference to any other, to express those ideas which they deemed it important the king should immediately possess.

Pictures, as well as gestures, are a very imperfect mode of communicating ideas, as they must, from their very nature, be limited, in a great degree, to the description of external events. They fail in disclosing the connections of those events, in developing dispositions, intricate trains of thoughts, and, in some measure, the passions.

§. 110. *Of hieroglyphical writing.*

HIEROGLYPHICKS, (from the Greek words, *HIEROS*, sacred, and *GLYPHO*, to carve,) are figures, sometimes painted, or embroidered, and at others, carved out ; used to express ideas. They differ from pictorial writing, chiefly, in being an abridgment of it, and also in this particular, that they select, by the aid of analogies more or less remote, figures for the purpose of expressing the less obvious mental emotions and abstract truths.

Hieroglyphicks were employed much more among the Egyptians than elsewhere, and the whole art probably arose

in this way. The method of communicating thoughts by means of paintings, as among the Mexicans, and which, undoubtedly, existed among the Egyptians, previous to the invention of Hieroglyphicks, was found inconvenient. The work was difficult in the execution, and bulky when it was completed; and there was, accordingly, very soon an attempt at the abridgment of that method.

Thus, the head might be used to designate a man; two or more hands with weapons opposed, a battle; a scaling ladder, set against a wall, a siege; a leafless tree, the winter. But when those, who depended upon this mode of expressing their thoughts, came to certain classes of the passions, the moral qualities, and a variety of abstract truths, they were under the necessity of finding out certain sensible objects, which bore or were supposed to bear some resemblance to such ideas, and, consequently, to go further in such instances, than a mere abridgment of pictorial delineations.

The eye was selected, in reference to such analogies, to signify wisdom; ingratitude was expressed by a viper, biting the hand, that gave it food; courage, by a lion; imprudence, by a fly; cunning, by a serpent.

On the temple of Minerva at Sais, there were the following hieroglyphical characters, an infant, an old man, a hawk, a fish, and a river horse, expressing this moral idea; ALL YOU, WHO COME INTO THE WORLD, AND GO OUT OF IT, KNOW THIS, THAT IMPUDENCE IS HATEFUL; a plain and practical truth, quite worthy to be read and understood by the people.

As the number of ideas among the people increased, and became more and more abstract, greater ingenuity was required in the invention of hieroglyphical characters to express them. Thus; a winged globe, with a serpent issuing from it, came to denote the universe, or universal nature.

The opinion has been often expressed, that the knowledge, wrapt up in the hieroglyphical characters of the Egyptians, and which embraced history, laws, and civil polity, was limited wholly to the priests, and that the com-

mon people were made acquainted with it, only as they received it from the priests. This might from some causes have been the fact ultimately ; but probably hieroglyphicks were at first designed not more for the priests than for the people, not to conceal knowledge, but to preserve and to communicate it.

We come now briefly to consider the written characters of the Chinese.

§. 111. *Of the written characters of the Chinese.*

It is a peculiarity of the Chinese language, that it employs CHARACTERS, i. e., artificial and arbitrary delineations, to express ideas, instead of words. Thus, for the idea, expressed by the English word, PRISONER, we have this delineation, which is less complicated than many others, viz. a figure, approaching in its form to a square with another figure nearly in the shape of an equilateral triangle, placed in the centre of it. The character, which, as it is articulated, is EUL, and answers to the English word, EAR, is somewhat in the shape of a PARALLELOGRAM, crossed at nearly equal distances from the ends by lines, drawn at right angles to the sides.

As every separate idea must have a distinct, separate character, standing for it, they are of course numerous. The elaborate Chinese work, called by way of distinction, THE GREAT DICTIONARY, contains sixty thousand of them ; although an acquaintance with a far less number, it is supposed, with no more than two thousand, will enable one to read, that number being found sufficient for the understanding of treatises on common topics and for the ordinary transactions of business.

§. 112. *The Chinese character an improvement on the hieroglyphical.*

As hieroglyphicks are an improvement on the mode of expressing ideas by painting, the characters employed by the Chinese may with good reason be considered the next

step in advance of hieroglyphicks. It is a proof of this, that many of the characters, particularly those called elementary, bore originally an analogy or resemblance to the objects, for which they stand. They were of course anciently hieroglyphicks, although now arbitrary characters. The fact, on which this conclusion is founded, is ascertained by consulting ancient inscriptions on cups of serpentine stone, on vases of porcelain, on seals of agate, and the characters used in editions of very ancient books. The characters, which at present stand for the sun, moon, a field, and the mouth, are quite arbitrary, and we discover no analogy between them and the object; but it was otherwise at first.

The sun was originally represented by a circle with a dot in the centre; the moon, by the segment of a circle; a field by a figure resembling a square, set off into smaller divisions by two lines intersecting each other at right angles in the centre; a mouth by a figure, intended to resemble the projection of the lips.

The Chinese character, then, may be considered to be the connecting link between hieroglyphicks and alphabetical languages. And its comparative value, as a means of expressing thought, seems to be indicated by the place, which it holds, viz. greater than that of the purely hieroglyphical system, and less than that of the languages, formed of alphabets.

Note.—The progress of the system of the Chinese from a hieroglyphical to a purely arbitrary character may be illustrated by the following story.

A tavern-keeper in Hungary, unable to write, kept account of the sums due to him by strokes chalked on his door; to each series of strokes was annexed a figure to denote the customer, to whom they applied. The soldier was represented by the figure of a musket; the carpenter by a saw, the smith by a hammer. In a short time for convenience, the musket was reduced to a straight line, the saw to a zig zag line, the hammer to a cross; and thus began to be formed a set of characters, gradually receding from the original figure. The resemblance might, at last, be entirely lost sight of, and the figures become mere arbitrary marks.

§. 113. *The invention of alphabetick language a subject of dispute.*

There is a great distance between the arbitrary characters of the Chinese, which are employed as the signs of ideas merely, and alphabetical language.—Nor is it very easy to see, how the latter could flow out of the former, or what reciprocal connection of any kind they possess. Indeed it has been strenuously contended by many persons, that no progress of the human mind whatever, as it went forward from its barbarous to its more enlightened conditions, could have arrived at this wonderful invention. They consider it the gift of God.

The arguments on both sides of the question, Whether alphabetick language be of human, or of divine origin, are numerous and ingenious. But as the nature of our design requires us to avoid, as much as possible, long discussions, this must be our apology for declining an inquiry, which is certainly interesting, and not unimportant. Of those, who maintain, that language is of divine origin are Warburton, Johnson, and Blair; of the opposite opinion are Richard Simon and Condillac; with others on both sides.

Note.—We subjoin in this note the remark, which may possibly be of use to future inquirers on the subject treated of in this chapter, that there was anciently among the Peruvians something like the arbitrary characters of the Chinese. That people early contrived the following method of expressing and preserving their thoughts, viz. by means of cords of different colours and by knots on these of various sizes and differently arranged.

Something similar seems to have been practised among a North American tribe of savages, the Osages; as appears from the journal of one of the missionaries among them under date of Aug. 8, 1825.

“Proposed to White Hair to assemble his people to hear preaching. He declined, alledging, that I gave him no tobacco. Sans Nerf said, it was bad to assemble the people; they did not understand well; but if I would tell what I had to say, he would tell it to the people. He then seated himself with his bundle of sticks, and I expressed to him twelve or fifteen ideas respecting God, his government, &c. For every idea he laid down a stick, which is his manner of writing. After I had finished, he asked various questions, soliciting further explanations, until he was satisfied. He then counted all his sticks and said, I understand it all.”

CHAPTER ELEVENTH.

USE OF WORDS.

§. 114. *Superiour excellence of alphabetical language.*

In whatever way we may have come by alphabetical language, whether God himself were directly its author, or whether he early raised up some happy inventor, whose remembrance is now passed away, it is truly, if we may be allowed a scriptural allusion, a price, put into our hands, for the getting of wisdom. The single circumstance, that it is fitted to be employed, as a sign both of things and of vocal sounds, renders it greatly superiour to the afore-mentioned modes of expressing thought, gestures, symbolick actions, hieroglyphicks, paintings, Chinese characters, or other methods, which may have been at any time used.

As mental exertions are intimately connected with those means, by which they become obvious or are made known to others, one proof, and by no means a small one, of the superiour excellence of this over other methods may be found in the intellectual degradation of Savages and even of the Chinese themselves, compared with the nations of Europe. To whatever other causes this difference may be ascribed, the superiority of the latter in the signs of thought, which they employ, is undoubtedly one cause.

It may be said of alphabetical language in one sense, that it not only expresses our ideas, but multiplies them; at least, the facility of expressing and communicating thought by means of it sets men upon renewed thinking, and the result is wider views, more correct principles, sounder policy; moral, civil, and scientific improvement.

§. 115. *Words are artificial and arbitrary signs.*

Words, whether we consider them, as written or spoken, for, as they are thus respectively considered, they form the

two general divisions of written and spoken language, are arbitrary and conventional. They are used, as the signs of ideas, not because there is any natural or inherent fitness in them for this purpose, but are thus employed by agreement or general consent. So that the emperor, Augustus, confessed with good reason, that, while the political and military movements of the world were under his direction, he had not power, of himself alone, to introduce a single, new word into the Latin tongue. If this statement were not correct, if words had any natural fitness for that purpose, for which they are employed, and were not conventional, there would be but one language; all nations would use the same words, instead of the English employing the word, *WHITE*; the Latin language, *ALBUS*; the French, *BLANC*; and the German, *WEISS* for the same thing, with a similar diversity in the expression of other ideas, and in other languages.

It ought to be observed, however, if we consider language, as it meets the ear instead of the eye, if we look at spoken, in distinction from written language, that there is a slight exception to this general view of its nature. We allude to a class of terms, of which the words, *CRASH*, *TWANG*, *BUZZ*, *WHISTLE*, *SHRILL*, *BATTLE*, may be mentioned as specimens. There is evidently some resemblance between these words, as they are enunciated by the voice, and the things, for which they stand; in other languages, some words, similar to these, that is, having a like relation to the things, for which they stand, are to be found.

So that in regard to this very limited class, when we consider them merely, as they come from the voice or are sounded, there may be said to be a natural fitness or adaptation in the words to the things, which they express: but with this exception, which is one of very limited extent, words are truly arbitrary and conventional signs.

§. 116. *Words at first few in number and limited to particular objects.*

In the infancy of the human race, men were without a

knowledge of the arts; they had no laws, but the dictates of conscience, no regularly instituted form of government; they lived under the open sky, except when they retreated from the storm or the sunshine to the shade of trees or the cooler recesses of caverns. Their ideas, therefore, were few; the articulate sounds, which either the active ingenuity of nature, or the special interference of Providence had taught them not only to frame, but to employ as the instituted signs of things, must have been few also; even more so, than their ideas.

The few names, which they were able thus early to employ, related solely to the objects, with which they were immediately and particularly conversant; they had a name for the tree, under which they sat at noon; for the cavern, to which they occasionally retired; for the fruit, which relieved their hunger; and for the running water, at which they slaked their thirst. Afterwards they were led to form general names, standing for a number of objects, and probably in the following manner.

§. 117. *Of the formation of general names or appellatives.*

Man, naturally possessed of too much activity of spirit, to rest satisfied with remaining in one place, or to quiet his curiosity with a small number of objects, engages in some new enterprise, explores new tracts of country, and thus enlarges his knowledge. In going from place to place, he necessarily meets again with those particular objects, with which he had formed such an intimate acquaintance in his first residence. He meets with other trees, with other animals, with other caves and fountains, which he at once perceives to be of the same kind with those, that have previously come under his observation.

The recurrence of these new objects instantly calls up the others. This happens by a law of his nature, which he cannot control;—and the recollection is the more intense, as, in the infancy of things, curiosity is more alive, and astonishment more readily and deeply felt. The ob-

jects, with which he had become first acquainted, could not be recalled without a remembrance, at the same time, of the names, which he had given them. As he perceives the objects, which he now beholds, to be the same in kind with those, which he first knew, he at once, and it might almost be said, by a natural impulse, concludes, that they have an equal right to the names with those, to which those names were first appropriated. He, therefore, exclaims, *a tree! a cave! a fountain!* whenever and wherever he meets them. And thus what was at first a particular term, and was employed to express only an individual, has its meaning extended, and comes in time to stand for a whole class of objects.

Such, there can hardly be a question, was the origin of general names; and the statement is not only agreeable to the natural course of things, but is indirectly confirmed by many incidents. When the Spaniards first arrived at a certain region, bordering on the gulph of Mexico, and found, that the soil was rich, the dwellings good, the people numerous; they cried out, it is another Spain, and after that it bore the name of New Spain. And Livy, in connection with the early history of Rome, relates concerning two Trojan chiefs, Antenor and Aeneas, that the places in Italy, where they respectively landed, were called by them Troy, probably from the perception of some slight resemblance in the appearance of the shore or of the interior country to the places of their previous residence;—so readily does the mind connect together things, which are remote, and seek for analogies between what is novel and what is familiar. And it is on this principle, that we so often find ourselves in this country giving names to the objects around us, in allusion to what exists in some other continent; calling a large river, another Thames, and lofty mountains, the American Alps.

§. 118. *The formation of appellatives the result of a feeling of resemblance.*

We discover, in the way which has been mentioned, the origin of appellatives or common names, (in treatises of

logick more commonly termed genera and species,) the formation of which has sometimes been considered a point of difficult solution. Taking the statement, in the last section, to be the true one, it follows, that there is, previous to the giving of the common name, a feeling or perception of resemblance, prevailing among those objects, to which the common name is applied.

If there had not, between the perception of the objects and the giving of the common name, been an intermediate feeling of resemblance, the primitive framers of language would have been as likely to have assigned the appellative to the cave and the mountain, or to any other things altogether dissimilar, as to those resembling objects, to which it was assigned.

When, therefore, those persons, who hold to the doctrine of the Nominalists, say, that all general ideas are but names, they appear to mistake ;—there is something more than the mere name, viz., that feeling of resemblance, which has been mentioned, and which, although it is difficult to explain it, except it be by referring each one to his own intellectual experience, is clearly too important a circumstance to be hastily overlooked, and thrown out of the question.

§. 119. *Our earliest generalizations often incorrect.*

When man first opens his eye on nature, (and in the infancy of our race, he finds himself a novice, wherever he goes,) objects so numerous, so various in kind, so novel and interesting, crowd upon his attention ; that, attempting to direct himself to all at the same time, he loses sight of their specific differences, and blends them together, more than a calm and accurate examination would justify. And hence our earliest classifications, the primitive genera and species, are often incorrectly made.

Subsequently, when knowledge has been in some measure amassed, and reasoning and observation have been brought to a greater maturity, these errors are attended to ; individuals are rejected from species, where

they do not properly belong, and species from genera.

Logical writers give a different account of the origin of genera and species. We first separate (say they) the qualities, combined in the objects, which come under our observation, and where we are able to trace the same quality or a number of them in different objects, we rank those objects together as a species or genus, and give a common name. Thus, John is a man six feet high, and of a light complexion, but Peter is both short and swarthy, while the stranger, who is walking with them, is as tall as John, and his countenance not less dark than Peter's. Although there are some things, in which these three persons differ, we readily perceive, that there are other things, in which they agree, such as erect figure, speech, and reason; and to this general perception, notion, or feeling of resemblance, we give the name, MAN. And man thenceforth becomes the name of a species.

On this account of the origin of genera and species, given in books of logick, we briefly remark, that all scientifick classifications must be formed in this manner, by an examination and comparison of individuals. But then it is to be observed, that men generalize and form classes, before they are able to do it in an exact and scientifick manner. There is an imperfect generalization, which is prompted by nature, and which looks chiefly at resemblances, without minutely inquiring into the differences of objects. This comes first. Those corrections, which are made by resorting to the logical or scientifick method, come afterwards.

May further be consulted on this part of this chapter, Stewart's Elements, Vol. II. chap. II. sect. 4. with note K., Adam Smith's Considerations on the first formation of languages,—Brown's Philosophy of the mind, Lect. XLVI. XLVII.

§. 120. *Illustration of our first classifications from the savages of Wateoo.*

The English navigator, Cook, in going from New Zea-

land to the Friendly Islands, lighted on an island, called Wateooo.

"The inhabitants (he says) were afraid to come near our cows and horses, nor did they form the least conception of their nature. But the sheep and goats did not surpass the limits of their ideas, for they gave us to understand, they knew them to be *birds*."

Captain Cook informs us, that these people were acquainted with only three sorts of animals, viz. dogs, hogs, and birds.

Having never before seen any such animals as a cow or a horse, they beheld their great size and formidable aspect with admiration; filled with fear, they could not be induced to approach, and knew not what to call or to think of them. They noticed the goats and the sheep, and clearly saw, that they were different from the dogs and hogs, with which they had been acquainted. But how did it happen, that they called them *birds*?

There is no nation so rude and uncivilized, as not to have some few general terms, and how those general terms are formed, we have above explained. Having noticed a variety of birds in their waters and forests, the people of Wateooo had undoubtedly found it necessary before this period to assign some general name or appellative to the flying animal, expressive of those resemblances, which evidently pervaded the whole class. They called them, we will suppose, *BIRDS*. Knowing there was a great variety of them, and that they were of different sizes, they not unnaturally applied the same term to the sheep and goats of the English. They knew not but there might be some new class of birds, which they had not hitherto noticed; they saw no insuperable objection in the size of the sheep and goats; and their agility and power of climbing over rocks and steep ascents readily reminded them of the power of flying, which they might imagine those animals had not yet thought proper fully to exhibit.

But they could clearly have no thoughts of this kind of cows and horses; and as to hogs and dogs they had no generick term for them, having never known more than

one variety or class, and having never been led to suspect, that there were any others.

If any should be disposed to make strange of this classification of these untutored savages, a little reflection may perhaps diminish their admiration. There are classifications to be found in the present improved state of the natural sciences not more accurate than this;—that arrangement, for example, which assigns to the same “class and ranks under one name the man, that walks upright and the whale that swims, the ant, that creeps, and the gnat, that flies.”

§. 121. *Whether reasoning be possible without general terms.*

It has been maintained by the Nominalists, who hold to the opinion of no general ideas, separate from their names, that no process of reasoning, however concise, can be carried on without the aid of general terms; and of course, the statement, made in §. 118, that there must be a feeling or notion of resemblance, that is, a general idea, distinct both from the individual objects and from the common name, cannot be true. An attention to what takes place in the minds of infants, shows the contrary; that they *can* reason, draw conclusions, from one thing to another, and that, consequently, they have general ideas such, as have been explained, that is, certain general but real feelings of resemblance, altogether and essentially independent of the names, which are subsequently made to stand for them.

It cannot, indeed be said, that the infant carries on its arguments to any great extent, but it does to some extent, and accurately. Were it not able to follow out some concise trains of argument, its existence could hardly be preserved. When the infant has once put his finger in the flame, he avoids a repetition of the experiment, reasoning in this way, that there is a resemblance between one flame and another, and that what has caused him pain, will be likely under the same circumstances to cause the same sensation. When the infant sees before him some glittering toy, he reaches his hand towards it, and is evidently

induced to do so by a thought of this kind, that the acquisition of the object will now follow the effort of the hand, as it has a similar effort previously made.

Words, then, whether general or particular, are not absolutely necessary to reasoning, and of course there may be ideas both general and particular, and those ideas may be compared together without words. The illustrations, which have been given, are sufficient, although brought from what we perceive to take place in infants. It is hazardous to refer on this point to those, who are grown up and have for years employed language. The words and the thoughts are, in this instance, so strongly associated, that it is difficult to separate them.

"The use of general terms," says Brown, "is not to enable man to reason, but to enable him to reason *well*. They fix the steps of our progress. They give us the power of availing ourselves with confidence of our own past reasonings and of the reasonings of others. They do not absolutely prevent us from wandering, but they prevent us from wandering *very far*, and are marks of direction, to which we can return. Without them we should be like travellers, journeying on an immense plain without a track, and without any points on the sky to determine, whether we were continuing to move east or west, north or south."

§. 122. *Of the formation of verbs.*

In the remarks, which have gone before, we have given an account of the origin of appellatives, or nouns substantive; there are other ideas, expressed by another class of words, viz. VERBS. And these words are of great consequence both in the construction and the application of language. As the ideas, expressed by verbs, concern actions rather than objects, and the attributes and affections of things rather than the things themselves, and cannot, therefore, be so easily defined to the understanding, and fixed upon by it, words of this kind were not, we may suppose, so rapidly formed as others, although some of them must have been of very early origin.

Their origin may be illustrated in this way. Let it be admitted, that the primitive inhabitants have given names to certain wild animals; Condillac supposes, that such names were given first, before those of trees, fountains, &c. No matter on what principle, those names were selected, for after all the investigations in regard to it, it is still a subject of doubt. It soon happens, as is very natural and reasonable to be imagined, that they see one of these animals, advancing towards them with great speed and apparent ferocity. Certainly they would have an idea of the motion of the animal, as something different from the animal itself; and if they could give a name to the animal, why not to the fact of his coming towards them or running from them, as the fact might be?

In the formation of the noun substantive or general term, they exclaimed, The tyger! The lion! and this exclamation became in time the common name. But now they discover a new attribute or action of the wild beast, which affects them strongly and deserves a distinct appellation, and, hence, they utter some new exclamation; it may be conjectured, the word, COMES, or RUSHES; and the cry now is, tyger—rushes! lion—comes! The articulate sounds, which under such circumstances are adopted, whatever they may be, are eventually fixed upon, as the conventional and permanent representatives of certain actions, attributes, and affections of things, and in the maturity of society and of knowledge, when man finds all that he has learnt subjected to a more exact and scientific classification, they are accordingly classed as VERBS.

§. 123. *Of the formation of conjunctions and other particles.*

It has been conjectured, that nouns and verbs were, in time of origin, the earliest of all the parts of speech; and, in truth, the hypothesis does not rest solely upon conjecture. It was the object of men at first to express their ideas, as they could; and they reckoned it of but little consequence, whether they did it neatly or elegantly.

Conjunctions, adverbs, prepositions, relative pronouns, were introduced by degrees, as they were found to be needed ; but nouns and verbs could never be dispensed with. And in addition to this consideration, that these parts of speech could not at any time have been dispensed with, there is much reason to suppose from a variety of investigations, that the particles, especially conjunctions, prepositions, and adverbs, were derived either from verbs or substantives, and of course they must have been subsequent in origin.

It will at this time be sufficient briefly to examine this point in respect to conjunctions.

The conjunction, *IF*, was originally a verb in the imperative mode, viz. *GIF*, the imperative of the Saxon word, *GIFAN*, which is the same with the modern, English infinitive, *TO GIVE*. If we consider the original import of the words in this sentence, viz. *If ye love me, ye will keep my commandments*, it will stand thus ; *Give or grant this, viz. ye love me, ye will keep my commandments*.

The conjunctions, *UNLESS*, *LEST*, and *ELSE*, are derivatives from the Saxon verb, *LESAN*, to dismiss. The meaning, conveyed in this sentence, viz. *Unless ye believe, ye shall not understand*, may be thus analyzed ;—*Dismiss, ye believe, (the circumstance of belief being out of the way,) ye shall not understand*.

The conjunction, *THOUGH*, was originally a verb in the imperative from the Saxon, *THAFIAN*, meaning to grant or allow. The word was originally *THAF* or *THOF*, and is thus pronounced by many of the common people in England and the United States to this day. This sentence, *Though he slay me, I will trust in him*, may be thus explained, in conformity with the etymological derivation ;—*Allow, grant this, he will slay me, I will trust in him*. Other particles, particularly adverbs and prepositions, may, in many cases, be traced to nouns.

§. 124. *Further remarks on the meaning of particles.*

It is proper to guard ourselves here, by saying, that when a language is once fully formed and settled upon, we would not advise a confident and indiscriminate reference to the etymology of particles, in order to determine their present significancy; although in many cases, as in those mentioned in the preceding section, such a reference throws light upon them. Whatever particles may have been at first, whether nouns or verbs, or whatever direct and positive significancy they may have once had, they are at last, when the language is fully formed, evidently without meaning, except so far as they are connected with other words.

The proper use of them seems to be, to express the states of our mind, as we pass from one clause of a sentence to another, or from one proposition to another; also the restriction, distinction, and opposition of our thoughts. Admitting, then, that, in some instances, we can derive considerable aid from etymology, the surest method of ascertaining the meaning of this class of words, is by observing the operations of our own minds, as we connect together our ideas in clauses, sentences, and consecutive propositions.

§. 125. *Of the origin of particular or proper names.*

Although general names or appellatives, as appeared in §. 116, were first applied to particular objects, as soon as they became general and were employed to denote classes of objects, they were no longer of use in the specification of individuals. Their utility in that respect necessarily ceased. Hence arose the class of substances or nouns, called particular or proper names; designed especially to indicate individual objects. In ascertaining to what objects terms of this kind shall be assigned, it can only be said, that we give proper names to such things, as we have frequent and urgent occasion to mention; no other rule can readily be laid down.

We, accordingly, give particular names to rivers, lakes, cataracts, mountains, because we have frequent occasion to speak of them individually, of the Mississippi, the La Plata, the Alps, and the Appenines. There is still greater reason, why we should give names of this sort to our fellow beings, with whom we constantly associate, and on whom our happiness is in no small degree dependent. But the assignation of proper names is far from being limited to men, or to rivers, or to mountains, or to cataracts;—we continually meet with them.

The merchant gives names to his vessels, the farmer to his oxen, the hunter to his dogs, and the jockey to his horses, on the same principles and for the same reason, that one river is called Ganges and another Danube, and that one man is called John, another William.

§. 126. *Of the meaning of words as used by different persons.*

Words are to be considered, in the first place, as signs of the ideas of the speaker, of the person, who uses them. Very little privilege indeed would it be for him to make use of words, except as the signs of his own thoughts.

A person, therefore, having a very imperfect notion of the powers of the electrick fluid, when he uses the word, ELECTRICITY, expresses, not the more ample idea of the well-informed philosopher, but that limited conception merely, which he himself happens to have.

We suppose a piece of gold to be presented to a child, and, undoubtedly, the prominent idea, which he has of it, is, that it is something of a bright, beautiful yellow. Another person, more advanced in age, adds the idea of weight to his complex notion of it; another, who is better acquainted with its true nature, adds malleability, fusibility and any other qualities, which he may have been enabled to discover. The word, GOLD, in each of these cases stands for that particular idea, which each person has, and no more.

But in our intercourse with our fellow men we find our-

selves constantly and necessarily making a reference in the language, which we use, to the ideas of others, as well as to the ideas in our own minds. I say, we do it necessarily, otherwise intercourse by means of language could not be carried on.

And it becomes then important to inquire, what is the general rule, by which men in this particular are to be governed? When have they done what is incumbent upon them in ascertaining the meaning of others?

Our duty in this respect is fulfilled, when we use words with their customary signification, employing them, as far as we are able to learn, with that meaning, which is ordinarily and generally attached to them.

When a meaning has been once affixed to a word, it is effectual in calling up to the mind the thing signified by it; the mention of the word or the sight of it, (such is the power of that characteristick of our mental constitution, which is termed ASSOCIATION,) almost as readily suggests the idea, as the object itself.

§. 127. *We have not words for all our ideas.*

Words are employed as signs, standing for ideas; but it must not be imagined, and certainly is not true, that all ideas have words, corresponding to them. This assertion holds in regard to both simple and complex ideas. Among our simple ideas are colours; we call one colour, RED; another, WHITE; but it is certainly not too much to say, there are many diversities or grades in those colours, which we have a notion of or perceive, but have never given them specifick names. The same may be said of the diversities in our sensations of hearing, touch, and taste.

There are various complex ideas, which a person has, or may have, and yet without names, answering to them. In translating from one language into another, the truth here stated is clearly perceived; in reading the German language, for example, which has a large number of very expressive compounds, we often meet with words, which suggest to the mind very clear ideas, but find no single

words in English precisely corresponding. And it is sometimes with difficulty, that we can express them even by a number or combination of words. But, in general, we find in every well-formed language words, sufficient for the expression of those ideas, which are most distinctly formed, and which, in the intercourse of life, we have most frequent occasion to communicate.

§. 128. *Of the definition of words.*

The schoolmen defined terms *PER GENUS ET DIFFERENTIAM*, that is, by a term more general, than the word to be defined, with an additional word or words, expressive of some specifick or distinguishing quality. Thus, man was defined by them *ANIMAL RATIONALE*, an animal endued with reason; *ANIMAL* being the term, wider in signification or more generick than man, and *RATIONALE* the epithet, indicative of the difference between man and other animals. A serious objection might be readily raised to this definition. If the schoolmen meant by the epithet *RATIONALE* what has been termed the discursive faculty or that operation, by which we compare together propositions and deduce conclusions from premises, it might be questioned, whether horses and elephants are not men, since it is the opinion of very many, that they possess this ability in some small degree.

A better mode of definition is by enumerating and explaining some essential elements, entering into the nature and composition of the thing to be defined; and this analysis of the elementary parts may be more or less particular, as circumstances require.

It should be remarked here, that we now speak of the definition of words, standing for complex ideas; since, as already observed in §. 50, where the reader is referred to this section for a further view of the subject, simple ideas do not admit of definitions.

No one can make the simple ideas of red, white, blue, sweet, bitter, &c., more clear than they are at present by any definitions whatever, which can be given. Motion

is a simple idea. It was defined by the schoolmen *ACTUS ENTIS IN POTENTIA QUATENUS IN POTENTIA*, the act of a being in power as far forth as in power. This, instead of making our idea of motion any more clear, is quite unintelligible.

At a later period it has also been defined a passage from one place to another. To this definition there is this objection, that passage is synonymous with motion, and it amounts to no more than to say, that motion is motion from one place to another.

Every person understands what is the meaning of the word, *light*, but the schoolmen, in order to make this general understanding more easy and clear, defined it the act of perspicuous as far forth as perspicuous ; but if this definition should be given to a blind man, who had never possessed the faculty of sight, he would clearly be no wiser for it.

Although it be difficult, or rather impossible to define simple ideas, to make them any clearer than they already are, what are called complex ideas admit of a definition. Complex ideas consist of various simple ideas combined together; the words, standing for them, cannot, indeed, of themselves, suggest the simple ideas, and show us what they are, independently of the aid of the senses ; but they may clearly and readily indicate to us, how these ideas are to be arranged and combined together in order to form complex ones. The word, *rainbow*, expresses a complex idea. Accurately define it by an enumeration of the colours, entering into its composition, and by a statement of its appearance to a person, who has the faculty of sight, and he will understand or have a conception of it, although he may never have seen one ; and this happens, because he has the simple ideas, and the words or description shows him, how they are combined together. But it is impossible to impart such a conception to a person, who has always been blind, because he has never had the simple ideas of colours ; and words merely can never convey to him that knowledge.

§. 129. *Of the imperfection of language.*

Language, notwithstanding its great and undeniable

advantages, has its imperfections, and in this, is like every thing else, connected with our earthly existence. It may be said in general, to be imperfect, or to fail of its object, whenever the same ideas are not excited in the mind of the hearer or reader, as in that of the speaker or writer. Nor can we reasonably expect, when we look at the cause or foundation of this imperfection, that it will ever be otherwise; since that cause will be found to exist ultimately in the condition of the mind and in our ideas, rather than in the words, which stand for them. This requires a brief illustration.

It often happens, that men view the same objects and actions in different lights; whether it be owing to some difference in early education, or to local prejudices, or to some other cause, the fact itself is well known, and may well be considered, as frequently unavoidable. Hence different persons very often attach the same name to certain objects and actions, when their views of those actions and objects are not the same. One has a greater number, than another, of simple ideas, entering into his complex notions, and perhaps, in the formation of the compound, they respectively give to those simple ideas a different relation to each other. The consequence, therefore, is, that, in such cases, as have now been mentioned, the names or words, which are used, necessarily fail of exciting in the hearer the same ideas, that exist in the mind of the speaker.

Many of the disputes, which have existed in the world, (and the history of philosophical opinions shows, how numerous they have been,) have been caused by a misunderstanding of this sort; different persons using the same terms, when their ideas are not the same. In support of this remark, it will be enough merely to refer to the often repeated discussions upon virtue, conscience, faith, free will, obligation, religion &c.

But language, in so far as it is imperfect, fails of the great object, for which it was invented and agreed upon, and it, therefore, becomes important to diminish the amount of this failure and to guard against it, as far as possible.

To this end, the following rules on the use of words may be laid down.

§. 130. *Words are not to be used without meaning.*

RULE FIRST.—In the employment of language, the first rule to be laid down, is this, that we should never use a word without some meaning. It may be thought extraordinary, that any should use words in this way, but a little examination cannot fail to convince one of the fact. Let any one inquire of those persons, who are in the habit of employing such words, as instinct, sympathy, antipathy, and a variety of others, which might be mentioned, and it will speedily appear, that, while some are greatly at a loss to assign any sort of meaning to them, others are utterly unable to do it. They are applied, as one may say, by rote; they have been learnt from hearing others use them, and are repeated, because they have been learnt, without their significancy having ever been inquired into.

There are not only words used in this way, but whole phrases, of which the Peripatetick philosophy readily affords many instances. What can be said of “vegetative souls,” “intentional species,” “substantial forms,” “abhorrence of a vacuum,” and the like, but that they are combinations of terms without meaning; and while they have the appearance of science, are no better, than an intended imposition on the understanding?

This error is much more frequent, than has generally been supposed;—many words go down from one to another by a sort of hereditary descent, and are passively received and adopted, like a thousand opinions and prejudices, which exist again, merely because they have existed before. We are exceedingly apt to adopt words from our parents and instructors, and to repeat the peculiar phraseologies of our favourite sect or party, and either out of our great reverence for them, or from the circumstance of our being too indolent to make careful inquiries, we rest satisfied in a shameful ignorance of every thing but a mere sound. Hence, if it be considered desirable, that language should retain its value, which chiefly consists in re-

cording and communicating thought, the rule laid down should be strictly observed,—not to employ words without meaning.

§. 131. *Words should stand for distinct and determinate ideas.*

SECOND RULE;—It is not enough, that we use words with meaning, or have ideas for them, but a second rule is, that the meaning or the ideas be distinct and determinate.

We apply the epithet, *DISTINCT*, to simple ideas, meaning by the expression, that they should carefully be kept separate from, and not confounded with other simple ideas. The epithet, *DETERMINATE*, may more properly be applied to the class of our ideas, called complex. As complex ideas are made up of simple ones, when we say, that they should be determinate, the meaning is, that a precise collection of simple ideas should be fixed upon in the mind; that it should not remain a matter of uncertainty what simple ideas are included and what are not. We at once see the value of this rule. If our simple ideas are confounded, one with another, or if we know not accurately the elements of our complex states of mind, these circumstances necessarily diminish very much from the value of the words, standing for them. With this explanation, the rule cannot fail to be understood, viz.—That our words should have a distinct and determinate meaning; or what is the same thing, that the ideas should be distinct and determinate, which the words express.

The application of this rule seems to be peculiarly important in regard to terms, standing for mixed modes, especially such names of mixed modes, as are of a moral kind. And one reason of this is, that these terms have no settled objects in nature, no archetypes, to which they can be referred, which are external to, and independent of the mind itself. They have been rightly regarded, as a species of mental creations. The materials or simple ideas which compose them, are in a certain sense independent of the mind, but the arrangement of them is not; and they,

therefore, have an existence by the mere choice and act of the mind, and are properly intellectual formations.

The word *JUSTICE*, comes within the class of ideas, called mixed modes, and, being a moral term, is of frequent occurrence; but, although every person may be supposed to attach some meaning to it, that meaning is not always determinate, and, in consequence, the term often causes perplexity. We will imagine the proper definition of it to be this,—The assigning to any one a reward or punishment agreeably to *LAW*. It will readily occur, that the complex term will be involved in obscurity and uncertainty without a clear understanding of the subordinate idea, expressed by the word, *LAW*; that the compound or the whole will not be fully known, without a knowledge of the number and of the character of the parts;—and the same of other mixed modes.

In respect to the names of substances it should be observed, that the ideas, which the names represent, should be not only distinct and determinate, but such, as will accurately correspond to the things themselves.

It will, undoubtedly, be considered troublesome, to be under the necessity of complying with the directions here laid down, and to take so much care in settling in our minds the precise import of our complex notions. But it is a labour, which cannot well be dispensed with. Until it be undergone, men will often be perplexed as to their own meaning, and disputes, which might by a different course be speedily terminated, will be prolonged and multiplied without end.

§. 132. *The same word not to be used at the same time in different senses.*

THIRD RULE;—We are not to use the same word in the same discourse with different meanings; with this exception, that, if we should find it in some degree necessary slightly to vary the signification, which may sometimes be the case, notice should be given of it. But it is at once remarked, in connection with this rule, that words in all

languages have a variety of significations, and that it cannot well be otherwise, unless we are willing to multiply them to an inordinate and burdensome degree. This is true;—but it may justly be replied, that no well constituted language admits varieties of meaning, which the train of the discourse, the natural connection of thought fails to suggest. When, therefore, a person uses an important word in an argument with another, or in any separate discourse, whether the signification be the common one or not, it is rightly expected, that he employ it in the same sense afterwards, in which he was understood to use it, when he began. If he do not, there will be unavoidable misunderstanding; the most laboured discourses will fail of giving instruction, and controversies under such circumstances cannot be terminated. This making the same word stand for different ideas, is spoken of by Mr. Locke, as a species of cheating; it being much the same, as if a person in settling his accounts, should employ the number, THREE, sometimes for three; at others, for four, five, or nine, which could not be attributed to any thing else, than great ignorance, or great want of honesty.

§. 133. *Words are to be employed agreeably to good and reputable use.*

THE FOURTH RULE is, that we are to employ names with such ideas, as good and reputable use has affixed to them. One object of language is to communicate our ideas to others; and this object necessarily fails without an observance of this rule, since common or general use, in the meaning of writers on rhetorick, is no other, than good or reputable use.

This subject was briefly touched upon in §. 126, where it appeared, that, if we would fulfil the purposes of language, we ought to use words with their customary signification, employing them with that meaning, which, as far as we are able to learn, is ordinarily and generally attached to them. But this remark does not exhaust this topic,

It still remains to be inquired, What we are to under-

stand by common, or, what is to be considered the same thing, good and reputable usage?—and this is a point, which cannot be decided without some care, and a recurrence to some general principles. In answer to the question, What is the common usage of a language?—What is good and reputable use?—or What is that use of a word, which will justify one in adopting and employing it? the three following rules may be given.

§. 134. *What constitutes good and reputable use.*

(1) It is one circumstance in favour of the good and reputable usage of a word, which constitutes what is otherwise termed common use, that it is found in the writings of a considerable number, if not the majority of good authors. It is not, in ordinary cases, sufficient to authorize a word, that it is found in one merely, or even in a few such writers, and those, who are supported by such limited authority, cannot expect to be generally understood.

(2) A second direction is, that the words, which lay claim to good and reputable use, should not be provincial, or limited to a particular district of country;—Further, those words, which are recently introduced from a foreign tongue, either by merchants in the intercourse of business, or by travellers for other reasons or in other ways, but which are not naturalized, and are not known to be necessary, have not this character. Good and reputable words are such, as are in use among the great mass of the people in all parts of the territories of a country, however extensive, where any language is professed to be spoken. This is what is termed national use, in distinction from that jargon, which often springs up in neighbourhoods, or which, in the ways, to which we have already alluded, is at times introduced from a foreign source.

(3) There is implied, thirdly, in the common and reputable use of a language, that use, which prevails at the present time. If we would employ words with their customary signification, with that meaning, which is ordinarily attached to them, we must adopt the use of the period,

in which we live. It is not, however, necessarily implied in this rule, that we must limit ourselves to the present year or even the present age. Certain limits, it is true, must be fixed upon, which include our own times, but they may be of greater or less extent, although it is a matter of no small difficulty judiciously to ascertain and define them.

NOTE. The subject of the nature and characteristics of the use, which gives law to language, is particularly examined by Dr. Campbell in his *Philosophy of Rhetoric*. To this book, the reputation of which is too well established to stand in need of any recommendation here, the reader is referred for further suggestions on the topick of this section.

§. 135. *Of an universal language.*

The inquiry has sometimes been started, Whether there might not be a language, which should be permanent, and be employed by all nations ;—in other words, Whether there might not be an universal language ? The impracticability of such an universal tongue appears both from the nature and the history of this mode of expressing thought.

(1) The nature of language shows its impracticability.

It is an idea, which observation seems to have well established, that whatever is imperfect has a tendency to work out its own ruin ; and language, however excellent an invention, can never be otherwise than imperfect, since the human mind, which forms it, is itself limited, and is often running into error. It will illustrate this remark, when we are reminded, that the external, material world is one of the great sources of our ideas, but our mental powers being imperfect, different persons form different ideas of the same objects. They then agree in giving the same names to these ideas or combinations of ideas, and there often arises in this way a mutual misapprehension of that very agreement, which is not only the origin, but the support of language. The seeds of the mutability and destruction of language are, therefore, sown in its very birth,

since a very little reflection cannot fail to show, how many perplexities, how many discussions, how many changes may arise from this single circumstance, that, in consequence of the imperfection of our faculties, men often agree to consider words, as standing for what they imagine to be the same ideas, but which are not. We cannot, then, reasonably expect an universal and permanent language, until our minds can fully penetrate into the true nature of things, until our ideas are perfect, and different individuals can certainly and exactly inform themselves of the thoughts, existing in the minds of others.

Further ;—the political institutions of one country, the peculiarities in the aspects of its natural scenery, early associations, occupations, and habits, lay the foundation for a variety of thoughts and shades of thought, which, in other countries, will not exist, because the causes of their existence are not to be found. If thoughts, feelings, imaginations exist under these circumstances, words will be needed to express them, for which there will be no occasion in another country and among another people ;—so that we find here also a permanent and extensive cause of the diversities of language.

(2) The impracticability of an universal language is seen also from the history of languages in times past.

We cannot conceive of an universal language without supposing it to be permanent, for if there were any causes, which would operate to affect its permanency, the operation of the same causes would be felt in checking and preventing its universality. But if we search the whole history of man, in order to find a language, that has remained permanent, unaltered ; it will be an entirely fruitless pursuit. Not one such can be found.

There appears to have been originally in Asia Minor a language, spoken to a great extent, which after a time disappeared, so that the very name is lost. So far from being able to maintain itself and increase the territories, where it was spoken, it was at last broken up into a variety of subordinate idioms, certainly no less than seven, the Hebrew.

the Syriack, the Chaldaick, the Arabick, the Ethiopick, the Phenician, and Samaritan.

A common language seems also to have been the original foundation of the different dialects of Greece.

No reason can be given in explanation of the want of permanency in these ancient languages, which would not lead us to expect constant changes in any other tongue, and under any other circumstances. If all the nations of the earth could, by the providence of the Supreme Being, be made to-morrow acquainted with one universal speech, a knowledge of the nature of language and of its history would warrant us in predicting the speedy discontinuance of this universality and the division of the language of the world into the dialects of islands, continents, and sectional territories. So that the remark of De Stutt-Tracy, a French writer on the Mind, that an universal language is as much an impossibility as a perpetual motion, is not without reason.

§. 136. *Remarks of Condillac on the changes, and corruptions of language.*

It is a remark of Condillac, to whose treatise on the Origin of Knowledge, we have already had occasion to refer, that it is nearly the same in language, as in 'physicks, where motion, the source of life, becomes the principle of destruction. "When a language abounds (says he) with original writers in every kind, the more a person is endowed with abilities, the more difficult he thinks it will be to surpass them. A mere equality would not satisfy his ambition; like them he wants the pre-eminence. He, therefore, tries a new road. But as every style analogous to the character of the language, and to his own, hath been already used by preceding writers, he has nothing left but to deviate from analogy. Thus in order to be an original, he is obliged to contribute to the ruin of a language, which a century sooner he would have helped to improve.

Though such writers may be criticised, their superiour abilities must still command success. The ease there is in copying their defects, soon persuades men of indiffer-

ent capacities; that they shall acquire the same degree of reputation. Then begins the reign of subtile and strained conceits, of affected antitheses, of specious paradoxes, of frivolous and far-fetched expressions, of new-fangled words, and in short of the jargon of persons, whose understandings have been debauched by bad metaphysicks. The publick applauds; foolish and ridiculous writings, the beings of a day, are surprisingly multiplied; a vicious taste infects the arts and sciences, which is followed by a visible decrease of men of abilities."

CHAPTER TWELFTH.

CHARACTERISTICS OF LANGUAGES.

§. 137. *General remarks on peculiarities of style.*

The style of a writer is his choice of words and manner of arranging them. Every writer of genius employs a style in some degree peculiar to himself. The nature of language leads us to expect this. Language is the expression of thought, and all writers of real worth think and feel in some degree for themselves; their style, therefore, which embodies and sets forth their mental states to others, will have a form and impress of its own. The languages of nations also have a style or peculiarity of manner,—certain prevailing characteristics, which readily distinguish them from those of other nations.

The style of individual writers, the characteristics in the style of Savages in their brief records and speeches, and those also of the languages of civilized and literary communities are all subjects of philosophical inquiry, and never can be fully understood and explained without referring to some principles of the human mind.

§. 138. *Characteristicks of style in uncivilized nations.*

As uncivilized tribes are ignorant of alphabetical language, they are unable to furnish us with many specimens of mental effort ;—rarely any thing more than some brief historical sketches, war songs, and speeches. The words, which such tribes employ, are generally few in number, compared with the vocabulary of civilized nations ; and of this number only a small proportion are the signs of abstract ideas. Having but few abstract ideas, and, consequently, but few names for them, they are under a necessity of resorting constantly to figurative illustrations ; so that their language seems to partake of the materiality of the external objects, with which they are chiefly conversant. But aided, as they are, by metaphorical expressions, their stock of words still remains small ; and the sentences, which they utter, must, therefore, of necessity be short. These short and figurative sentences are inspirited with all the untamed passions of a savage mind.

“The bones of our countrymen (say the Chiefs) lie uncovered ; their bloody bed has not been washed clean ; their spirits cry against us ; they must be appeased ; sit no longer inactive upon your mats ; lift the hatchets ; console the spirits of the dead.”

§. 139. *Origin of apologues and of the parabolick style.*

Nations, while in an uncivilized state, or when at best they are only in their progress towards intellectual refinement, do not often attempt abstract reasonings or abstract speculations of any kind ;—and this is one marked characteristic of the style of such periods. The causes are chiefly two.

One of which is, that they have a small number of general terms ; and it could not be expected to be otherwise. It appeared at §. 121, that we are capable of carrying on trains of reasoning to some little extent without the aid of general terms or those words, which stand for abstract ideas ; but it was no less evident, that they are of great

use, and that without them all processes of reasoning must be very much circumscribed.

This circumstance also deserves consideration, as accounting in some measure for the absence of abstract speculations and reasonings from the mental efforts of nations in the early periods of their history, viz. They do not possess, to that number desirable, those parts of speech, such as conjunctions and relative pronouns, which are used to connect sentences and clauses of sentences, and to show their distinction from each other, or opposition. It appeared at §. 123, that these classes of words, which are evidently very important in long and connected trains of thought, and also adverbs and prepositions, are subsequent in their origin to nouns and verbs; in other words, that, in the formation of a language, these are the parts, which are completed last.

Under these circumstances, their reasonings, as might be expected, are applied to the minds of people by a variety of obvious and familiar illustrations,—by means of apologues and parables.

When Menennius Agrippa (year 260 of the Roman republick) wishes to convince the people of the necessity of subordination to the regularly constituted government, he lays down no abstract proposition and enters into no argument. The historian informs us, that he merely related, in an antiquated and uncouth way, the story of a rebellion on the part of the other members of the body, the hands, the mouth, and the teeth, against the stomach, and leaves them to make an application of it. The people understood what he meant.

Not to say any thing of the apologues and parables, attributed to Æsop and others, the Bible itself, written for the most part at a very early period, helps to illustrate these remarks. Who does not recollect the apologue of the trees by Jotham in the book of Judges, that of the two men in one city by Nathan, and a multitude of others;—in particular, the interesting parables of the Saviour?

culiar circumstances, the climate, government, habits, &c., of a people. Without an acquaintance, therefore, with their vernacular tongue, the critick will in vain take it upon him, to judge of the philosophy of their literature and character. It is this, that breathes the national spirit;—it fixes and retains it, after the nation itself is extinct.

Whatever may have been at any time thought, it will be found on examination, that those individuals, who are looked up to, as the eminent writers of a nation, seldom arise, until its language is nearly or quite completed. They employ it, as the people have formed it; and the people have formed it, as their feelings and habits prompted.

§. 143. *Of the correspondence between national intellect and the progress of a language.*

The circumstance, that language is a great and admirable instrument of intellectual power, is of itself no small confirmation of the hint thrown out in §. 142, that developments of intellectual strength will correspond to the progressive improvement of a language, and that its great men, those, who are to speak in it long as it shall exist, will not make their appearance, until it have arrived to some degree of perfection.

Let it be supposed, that in the midst of a savage tribe, whose language is rude, a person is found of perfect mental organization, capable of remembering, separating, and comparing ideas, with a quickness of invention, and other qualities of genius above the common lot. He has influence over the minds of others; he is consulted in difficult emergencies; he is accounted wise; but how far he falls short of the mark, which is reached by others of originally no greater genius, who appear in a civilized community with the advantage of a perfect language!

“It is with languages (says Condillac) as with geometrical signs; they give a new insight into things, and dilate the mind in proportion as they are more perfect. Sir Isaac Newton’s extraordinary success was owing to the choice which had been already made of signs, together

with the contrivance of methods of calculation. Had he appeared earlier, he might have been a great man for the age he would have lived in, but he would not have been the admiration of ours. It is the same in every other branch of learning. The success of geniuses, who have had the happiness even of the best organization, depends entirely on the progress of the language in regard to the age in which they live; for words answer to geometrical signs, and the manner of using them to methods of calculation. In a language, therefore, defective in words, or whose construction is not sufficiently easy and convenient, we should meet with the same obstacles as occurred in geometry before the invention of algebra. The French tongue was for a long time so unfavourable to the progress of the mind, that if we could frame an idea of Corneille successively in the different ages of our monarchy, we should find him to have been possessed of less genius in proportion to his greater distance from the age in which he lived, till at length we should reach a Corneille, who could not give the least mark of abilities." (Origin of Knowledge, part II. §. I.) This writer thinks, it may be demonstrated, that there can be no such thing, as a superior genius, till the language of a nation has been considerably improved.

§. 144. *Different languages suited to different minds.*

Some languages are more suited to certain minds than they are to others; more adapted also to the discussion of certain subjects, than others. The French language is simple, clear, precise, and, therefore, favourable to analytical investigations. And it is here, it may be conjectured, that we find one cause of the superior excellence of the mathematicians and philosophers, and of the comparative inferiority of the poets of that nation. Not that we mean to speak lightly of French poetry, for the genius of Corneille and other writers cannot but be felt even under the disadvantages of their language; but it cannot be presumed, that it would express, would give a reality of form and existence,

so admirably as the English, to the diversified, and illimitable genius of Shakespeare.

In no other languages, than the English and the German, could the *Paradise Lost* of Milton and the *Messiah* of Klopstock have been originally written; and into none others can their true spirit be transfused. To take a case yet more obvious, the Athenian orator could never have composed his orations in the language of the Prophets, that language being neither suited to his mind nor his circumstances. The original tongue of the Old Testament is well adapted to lyrics and some forms of descriptive poetry, and to the simplest species of narration, but not to philosophical analysis, and to such abstract reasonings, as are more or less found in orations of a political nature.

§. 145. *Difficulties of translating from one language to another.*

It was remarked, that the true spirit of the *Paradise Lost* and of the *Messiah* of Klopstock cannot be transfused into any other language, than those, in which they were originally written. All translations from one language to another are difficult, but this is emphatically true of poetry. But it is evident, that these difficulties could not exist to their present extent, if all languages had not a character or style of their own.

Every tongue will be found to have combinations of ideas, peculiar to itself, which are expressed by a single word, and which do not exist in this precise state of combination in other languages. See for instances §. 141. A variety of associations also will be connected with the words and phrases of one dialect, which are not connected with the corresponding words and phrases in others, and which slightly affect the meaning in a manner, not readily perceptible by a foreigner. These go, among other things, to constitute the style or characteristic of languages, and are found in poetry more than in writings on other subjects;—and hence the peculiar difficulty, which has always been experienced, of translating it.

§. 146. *Characteristicks of the Greek and Latin languages.*

There are characteristicks of a language, which are appropriate to some particular period of its progress, to its state of infancy, of manhood, or of decline. In its infancy it is metaphorical, wanting in copiousness, and adapted rather to express strong passions, than to abstract reasoning. In its manhood it seems to be more removed from the senses and to become more strictly the creation of the intellect; it has an increase in its range of expression, and is by degrees suited to abstract reasoning in its different kinds and to the various departments of literature. The causes and some of the marks of the decline of a language are to be found at §. 136, in the preceding chapter.

We have seen also, that there is an influence exerted by the language on the men of superiour minds, the early writers of a nation, and that particular languages are better adapted to some minds and some species of writing than others. The subject can be further illustrated by a brief specification of some circumstances, in which a number of important languages are found to differ; beginning with the Greek and Latin, which sustain a relation of no ordinary kind to certain living languages, which are extensively spoken.

The Greek and Latin differ from most modern languages in admitting of transposition, and for this purpose have furnished certain classes of their words with particular variations, by means of which they are made to refer to other words, with which they are naturally connected by the meaning or sense of the passage. Whether this power gives those languages any essential advantage over others, which are destitute of it, is a point, which has been variously decided. When these two languages are compared with each other, it will be found, that the Greek possesses remarkable harmony, which is at once perceived even by those, who do not understand the meaning of the words; it has a great abundance of words, expressive of the different classes of ideas and of slight variations of meaning,

which is what is meant by the copiousness of a language, and is supposed to possess more, than any other language, the quality of flexibility or the power of giving to its words a great variety of arrangements. The Latin is somewhat marked for an air of stateliness and majesty, but, compared with the Greek, is less copious and flexible; the circumstance of its want, in some degree, of flexibility, its possession of a form of majesty, which it is unable to assume and lay aside at pleasure like the Greek, renders it not well suited for easy conversation. We have in this language fine specimens of historical writing. It is not so well adapted to certain kinds of poetry, particularly the condensed and nervous sentiment, and the harmony of expression in lyrics;—Horace, a man of uncommon poetical genius, being the only successful instance in that kind of writing.

§. 147. *Characteristicks of the Italian language.*

The origin of the Italian language is a subject of no little difficulty, but among the various hypotheses, which have been advanced, that of Muratori seems, on some accounts, preferable to others. He considers the Latin language to have been successively adopted by the barbarian invaders and conquerors of Italy, but to have received from each of them a portion of their own phrases, inflexions, and pronunciation; and that the modern Italian was gradually formed in this way. In the fourteenth century, the language seems to have become fully constructed and fixed; both poetry and prose having then been carried to a pitch of excellence, not since surpassed.

Sweetness is so much the characteristick of this language, that it has been almost regarded by some, as if purposely formed for the service of musical genius. Although it is exceedingly harmonious, there is a want of diversity in its sounds, so much so that even its harmony proves tiresome. There has been in this language a historian, Machiavelli, who formed himself on the model of Tacitus, but it cannot be pretended, that strength is one of its char-

acteristics, or that it is equally suited with the Latin to a genius, like that of the Roman historian. Nothing can be more finely fitted, than the sameness of melody, which prevails in this language, to that state of mind, that plaintive and melancholy feeling, which is the subject of elegiack poems.

§. 148. *Characteristics of the Spanish language.*

The Spanish language, which is the favoured dialect of so many young and hopeful republicks on the continent of America, is essentially the same in origin with the Italian; but differing from it, notwithstanding, in many respects. It has, like all other languages, a character of its own. Sonorous and full, it seems to indicate, in its structure and movements, that dignified and measured solemnity, which is so well known to be characteristic of the people, who speak it. While it has not less than the majesty of the Latin, it much excels it in being adapted to the purposes of conversation and the common intercourse of life. As far as conversation is concerned, it is by some thought, although its pretensions come in competition with those of the French, to be the most elegant and courteous language in Europe.

The order of chivalry first arose and was longest sustained among the Spaniards; and as all the members of that romantick institution were bound to be polite, as well as heroick, it naturally happened, that there were introduced in this way many expressions of respect and politeness, which have since been retained.

In connection with these remarks, and as helping to illustrate the general views, given in this chapter, we bring to the notice of the reader certain criticisms, which have been made on the English translations of that interesting and well-known work, the *Adventures of the Knight of La Mancha*. It is sometimes said with great confidence, that the characters so finely drawn by Cervantes are still but very imperfectly known, excepting by those, who have read his work in the language, in which he wrote. A great

point, in giving an idea of the two prominent characters, is, so to unite the follies of the hero with a certain gentlemanly demeanour, suited to his rank, and the obsequious credulity of the squire with such profound deference for his master, that the one may never fail in courtesy, and the other may never be wanting in respect. As their intercourse is constant, and they are on terms of great familiarity, it is peculiarly difficult to prevent that familiarity of intercourse from becoming, on the part of the knight, something worse than dignified condescension, and, on the other hand, not less difficult to prevent the credulous and busy simplicity of the squire from degenerating into impertinence and disrespect. The line is here drawn with undeviating strictness in the Spanish, with the exception of a few instances of an extreme kind, where it seems not beyond the bounds of probability, that even chivalry should forget that dignified and scrupulous conduct, which it had ever professed. In no other living language could these two characters have been drawn, in the respects now mentioned, with such fidelity as in the Spanish; as no other possesses in the same degree the requisite qualities.

Of the French language we have already briefly spoken,—enough for our present purpose. Of the English, the language of so many millions of freemen, and the repository of the thoughts of so many gifted minds, it is sufficient to let those, who use it, judge for themselves;—just mentioning, however, the necessity of caution, lest their relation to it should betray them into a greater sensibility to its beauties than its defects.

§. 149. *Requisites of an interpreter of languages.*

From the views, which have now been taken of the characteristics of language, we are led to educe a number of inferences, which may be stated in the form of rules or principles of interpretation;—wishing to observe, however, that both the subject of the characteristics of languages and that of interpretation are worthy of a more extensive examination, than can be expected from such abridged hints as these. They open a wide field for literary exertion, which

has been zealously occupied by a few criticks, particularly among the Germans; and with such success, as to encourage others to emulate their example. Those, who pursue it, cannot fail to meet with encouragement. The subject of the nature and interpretation of language is in itself, independent of any remote consequences, one of exceeding interest, and demands success. When INTERPRETATION is conducted on the principles here laid down, it is no longer a business of conjugations and declensions merely, it is not a mere dry comparison of words, but the study of the philosophy of human nature.

RULE FIRST ;—The interpreter must have a good, grammatical knowledge of the vernacular tongue of the writer, whom he interprets. This, no doubt, is evident ;—it being a necessary, preliminary step.

RULE SECOND ;—The interpreter should have a philosophical knowledge of the language. Something more is necessary than a knowledge of single words, of declensions and conjugations, and of the rules of syntax. He must be acquainted with the prevailing spirit, or what are in this chapter termed the characteristics of the language. He must inform himself of the history of the people, learn their peculiar associations, their customs, the state of the arts, &c. In no other way can he understand the true spirit, or have, what may be otherwise called, a philosophical knowledge of any language ; and without such knowledge he can never do justice to his author. (See §. 141.)

RULE THIRD ;—He must know something of the author himself, whatever is peculiar in his situation, or, in other words, his personal history. If languages have characteristics or a style of their own, it is certainly not less true of individual authors ; and this diversity is partly owing to the peculiarities of their private fortunes. We cannot dissent from the saying of Petruchio in the play—

“ ’Tis the mind, that makes the body rich.”

It may be safely admitted, that the mind is not wholly dependent on outward circumstances. If it be truly great, it will show something of the excellence of its nature in all situations, in want, in woe, in persecution, in ignorance

itself, as the "sun breaks through clouds." But it is no less true, that circumstances are never without their influence; they give to the mind a new direction; and almost impart to it, in some instances, a new character. Hence the importance of this rule. We are to inquire amid what scenery of nature the writer dwelt? What early superstitions were made familiar to his mind? In what political and religious principles he was educated? What was his personal calling and the degree of his rank in life? What was his treatment from men? and what his peculiar views of human character? And it is not, until these things are made known to us, that we are fully prepared to estimate what he has written.

The remarks here made admit of an illustration in almost all writers of any original genius. But to take an instance, which is familiar, and on that account perhaps is best chosen, it may be confidently said, that they may be illustrated from the writings of the New Testament. We observe a difference in the style of Matthew and Luke, of Paul and John. The situations in which they were placed, and circumstances under which they acted, had undoubtedly an influence on their character, and through their character on their writings, but this was not the whole origin of these peculiarities. Even the natural temperament of the writer, by a powerful sympathy, communicates itself to the written composition; and while that of Paul is abrupt and vehement, like the soul of its author, that of John seems to express, in its very words and combinations, his affectionate disposition.

The apostle Paul, in particular, is a fortunate instance, to show the importance of attending to the peculiarities of individual writers. Peculiarities—whatever cause they may have arisen from—may be discovered in his writings, in the use even of single words. For instance, the word, *KATARGEIN*, signifying to remove, destroy, kill, make free, is very seldom found in any Greek classic author, but is found twenty six times in the apostle's writings; only once in all the other books of the New Testament.

St. Paul has sometimes employed such words, as he found

used in common conversation, and which, although not unfrequent in common discourse, would have hardly been considered admissible in classical writers, certainly not in the sense, in which he employs them. The word, *EXOUSIA*, (1 Cor. xi. 10,) primarily means power, dignity, &c ; but appears, by a fashion, which sometimes exists in language no less than in dress and in manners, to have been in the city of Corinth, the name of a woman's head-dress, which was worn, at the time of writing the Epistle to the Corinthians, in that city. There is no reason to think, that it is used in this sense by any other writer, either of the pure Greek, or of the Hebrastick. When, therefore, we learn in regard to the apostle Paul, that he was brought up in the doctrines of the Pharisees, that he afterwards embraced the christian religion, that he was driven from place to place, and resided in many cities, in Rome, in Ephesus, and particularly Corinth, that he was a person of great boldness, decision, and enterprise ; a knowledge of these circumstances in his personal fortunes and character throw much light on his writings.

RULE FOURTH ;—The views, which have been given, lead us to remark, as another and fourth rule, that the interpreter should possess an intimate acquaintance with the particular subject, on which his author treats ;—and not only this, should endeavour fully to possess himself of the spirit of the particular species of writing, of which the tract to be interpreted is a specimen, whether it be poetry, the style of essays, of mathematical treatises, of history, or of philosophy.

Nothing is more clear, than that the human mind, when called into exercise, will be differently affected according to the nature of that particular subject, to which its attention is directed. It will be characterized by calm reflections on the more intimate nature or the philosophy of created things ; or will be thrown into a series of closely concatenated propositions ; or will be animated by a creative power and form thousands of new and glowing images ; or will be excited by strong and declamatory impulses according to the characteristick tendencies of the exercise,

about which it is employed. The interpreter cannot do him justice without having his own mind brought into a similar position with the original author's; and in order to this, he must be acquainted not only with the subject of the particular writing in question, but also with the characteristics and spirit of that species of writing, to which it belongs. It would be presumption, not to say injustice in a mathematician, who had exclusively devoted himself to his chosen science, to undertake to pass sentence on the productions of a poet; those mental tendencies and that state of mind, which are adapted to the last mentioned department of literature, not being fitted to the former. It would be no less presumption and injustice for a mere painter to assume the criticism of musical compositions, or for a mere man of polite letters to attempt the interpretation of the writings and an estimation of the character of mathematicians.

NOTE. It may seem to be a proper place here, to mention a peculiar difficulty in the interpretation of the Bible, arising from the nature of the subjects there treated of. Revelation is a communication of those things, which could not have been fully learnt, and some of them could not have been learnt in any degree, by our unassisted faculties. It is a declaration of such facts, as eye hath not seen, and ear hath not heard.

As, therefore, we derive our ideas from sensation and from what takes place in our own minds, it ought not to surprise us, that our weak and limited understandings are incapable of forming a perfect conception of God, of angels, of spiritual bodies, of the soul being brought to judgment, of the resurrection from the dead, &c. The words, which are employed on these subjects, are not without meaning, but such is the nature of the things signified by the words, that the meaning of them is often necessarily obscure to us; and we here find a favourable opportunity both for the exercise of that religious feeling, which is termed faith, as to the things themselves, and also for the exercise of charity, when our own interpretations do not agree with those of any of our erring fellow beings.

CHAPTER THIRTEENTH.

PRINCIPLES OF MENTAL ASSOCIATION.

§. 150. *Of the meaning of mental association and of its general principles or laws.*

Our thoughts and feelings follow each other in a regular train. Of this statement no one needs any other proof, than his individual experience ;—we all know, not only, that our minds are susceptible of new states, but what is more, that this capability of new states is not fortuitous, but has its laws. Therefore, we not only say, that our thoughts and feelings succeed each other, but that this antecedence and sequence is in a *regular* train ;—a circumstance in our intellectual economy, which, it may be just observed, has the most direct and important bearing on our preservation and happiness. To this regular and established consecution of the states of the mind we give the name of MENTAL ASSOCIATION.

The term, ASSOCIATION, is perhaps preferable to any other. It may, with no little appearance of reason, be objected to the word, SUGGESTION, which has sometimes been employed, that it seems to imply a positive power or efficiency of the preceding state of the mind in producing the subsequent. But of the existence of such an efficiency we have no evidence. All that we know is the fact, that our thoughts and feelings, under certain circumstances, appear together and keep each other company ;—And this is what is understood to be expressed, and is all, that is expressed, by the term, ASSOCIATION.

By the principles or laws of association, we mean no other, than the general designation of those circumstances, under which the regular consecution of mental states, which has been mentioned, occurs. The following may be mentioned as among the primary principles of association, although it is not necessary to take upon us to assert, either that the enumeration is complete, or that some

better arrangement of these laws might not be proposed, —*VIZ.* RESEMBLANCE, CONTRAST, CONTIGUITY in time and place, and CAUSE AND EFFECT.

§. 151. *Resemblance the first general principle of association.*

New trains of ideas and new emotions are occasioned by resemblance ; but when we say, that they are occasioned in this way, all that is meant is, that there is a new state of mind, immediately subsequent to the perception of the resembling object. Of the efficient cause of this new state of mind under these circumstances, we can only say, the Creator of the soul has seen fit to appoint this connection in its operations, without our being able, or deeming it necessary to give any further explanation. A traveller, wandering in a foreign land, finds himself in the course of his sojournings in the midst of aspects of nature not unlike those, where he has formerly resided, and the fact of this resemblance becomes the antecedent to new states of mind ;—there is distinctly brought before him the scenery, which he has left, his own woods, his waters, and his home. The result is the same in any other case, whenever there is a resemblance between what we now experience, and what we have previously experienced. We have been acquainted, for instance, at some former period with a person, whose features appeared to us to possess some peculiarity, a breadth and openness of the forehead, an uncommon expression of the eye, or some other striking mark ;—to-day we meet a stranger in the crowd, by which we are surrounded, whose features are of a somewhat similar cast, and the resemblance at once vividly suggests the likeness of our old acquaintance.

§. 152. *Resemblance in every particular not necessary.*

It is not necessary, that the RESEMBLANCE should be complete in every particular, in order to its being a principle or law of association. It so happens, for instance, that we see a painted portrait of a female countenance, which

is adorned with a ruff of a peculiar breadth and display ; and we are, in consequence, immediately reminded of queen Elizabeth. Not because there is any resemblance between the features before us and those of the English sovereign, but because in all the painted representations, which we have seen of her, she is uniformly set off with this peculiarity of dress, with a ruff like that, which we now see. Here the resemblance between the suggesting thing and that, which is suggested, is not a complete resemblance, does not exist in all the particulars, in which they may be compared together, but is limited to a part of the dress.

That a single resembling circumstance, (and perhaps one of no great importance,) should so readily suggest the complete conception of another object or scene, which is made up of a great variety of parts, seems to admit of some explanation in this way. We take, for example, an individual ;—the idea, which we form of the individual is a complex one, made up of the forehead, eyes, lips, hair, general figure, dress, &c. These separate, subordinate ideas, when combined together, and viewed as a whole, have a near analogy to any of our ideas, which are compounded and are capable of being resolved into elements more simple. When, therefore, we witness a ruff of a size and decoration more than ordinary, we are at once reminded of that ornament in the habiliments of the British queen ; and this on the ground of resemblance. But this article in the decorations of her person is the foundation of only one part of a very complex state of mind, which embraces the features and the general appearance. As there has been a long continued co-existence of those separate parts, which make up this complex state, the recurrence to the mind of one part or of one idea is necessarily attended with the recurrence of all the others. They sustain the relation of near friends ; they form a group, and do not easily and willingly admit of a separation. The principle, which maintains in the relation of co-existence such states of the mind, as may be considered as grouped together, is the same with that, which so steadily and permanently

combines the parts of mixed modes or other complex ideas, and is no less effectual in its operation. What this principle is will more fully appear from remarks, shortly to be made, on contiguity in time and place.

§. 153. *Of resemblance in the effects produced.*

Resemblance operates, as an associating principle,* not only when there is a likeness or similarity in the things themselves, but also when there is a resemblance in the effects, which are produced upon the mind.

The ocean, when greatly agitated by the winds, and threatening every moment to overwhelm us, produces in the mind an emotion, similar to that, which is caused by the presence of an angry man, who is able to do us harm. And in consequence of this similarity in the effects produced, they reciprocally bring each other to our recollection.

Dark woods, hanging over the brow of a mountain, cause in us a feeling of awe and wonder, like that, which we feel, when we behold, approaching us, some aged person, whose form is venerable for his years, and whose name is renowned for wisdom and justice. It is in reference to this view of the principle, on which we are remarking, that the following comparison is introduced in *Akenside's Pleasures of the Imagination*.

———"Mark the sable woods,
 "That shade sublime yon mountain's nodding brow;
 "With what religious awe the solemn scene
 "Commands your steps! As if the reverend form
 "Of Minos or of Numa should forsake
 "The Elysian seats, and down the embowering glade
 "Move to your pausing eye."

As we are so constituted, that all nature produces in us certain effects, causes certain emotions, similar to those, which are caused in us in our intercourse with our fellow-beings, it so happens that, in virtue of this fact, the natural world becomes living, animated, operative. The ocean is in *anger*; the sky *smiles*; the cliff *frowns*; the aged woods are *venerable*; the earth and its productions are no longer a dead mass, but have an existence, a soul, an agency.

We see here the foundation of metaphorical language ; and it is here, that we are to look for the principles, by which we are to determine the propriety or impropriety of its use.

In every metaphor there is some analogy or resemblance ; it is a comparison or simile in its most concise form. There is an examination instituted and circumstances of similitude are detected ; not, however, by a long and laborious process, but in a single word. Hence it is the language of strong emotion ; and as such, is peculiarly the language of uncivilized nations, and, in general, of the most spirited parts of the poetry of those, that are civilized.

§. 154. *Resemblances in sounds ; alliteration, &c.*

Our states of mind are associated, one with another, not merely by resemblances existing in the external and visible appearances of things, to which those states or ideas correspond ; nor is the fact of their association limited to resemblances in the effects resulting from them ; they may also be associated by similitudes of various degrees in the words, which are appointed, as their signs. Sounds, which in a similar manner impress the organ of hearing, reciprocally suggest each other ; and this is especially true of words, whether they convey the same or similar meaning, or not. Thus, it is not impossible, that powders may suggest patches, and billets-doux may be associated with Bibles, not because there is any resemblance in the things, between powders and patches, billets-doux and Bibles, but because the words begin with the same letters, and there is, consequently, a slight resemblance in the sounds. It is evidently in consequence of the operation of association in this manner, that we find these very things brought together in a line of Pope's Rape of the Lock ;

" Puffs, powders, patches, Bibles, billets-doux."

This is an instance of what is termed ALLITERATION, an artifice in poetical style, which is not unfrequently employed, and sometimes with good effect.

ALLITERATION, if the meaning of the term be not al-

ready quite familiar, is the repetition of the same letter at the beginning of different words or any emphatick part of the same word, at certain short intervals. The following, in addition to the one already given, are instances of this practice.

"Up the high hill he heaves a huge round stone." Pope.

"Soon he soothed the soul to pleasures." Dryden.

"To high-born Hoel's harp, or soft Llewellyn's lay." Gray.

The poet often finds himself prodigally furnished with words, which would be suitable for alliterations. And his richness in such terms can be ascribed to nothing else, than the faculty of association, operating in the manner described;—with this additional circumstance in the case of the poet, that the operation is quickened and made more effectual, by his practice of seeking for words, which have a similarity of termination. It is possible, that the frequency of the recurrence of such terms operates, as a temptation to the poetical writer to employ them and to form stanzas, containing alliteration, more frequently than he ought to. Whatever may be the difference of opinion as to the positive merit or want of merit in this species of ornament, all readily admit, that its value cannot be accounted great. It is, therefore, to be employed with caution, and suits better on slight occasions and in subjects of no very serious import, than in those of a solemn and important nature.

Its good results may, for the most part, be summed up in these particulars;—(1) It sometimes affords us pleasure by reminding us of the power of the writer, who is able to express his meaning not only under the restraints of rhyme, but of those additional shackles, which alliteration so evidently imposes.—(2) Sometimes the meaning is more strongly expressed, than it could possibly be without alliteration, as in this instance;

"Up the high hill he heaves a huge, round stone."

The same might be shown in many other cases, especially in those, where the poet tries to imitate, which he sometimes does, by the structure and sound of his verses the thing, which he describes.—(3) As a rough stanza at

times is thought to be no defect, but rather the contrary, because it improves the others by contrast ; so lines, with alliterations, which are imagined to fail on the other hand or by excess of harmony, may break in upon the oftentimes monotonous sameness of poetick numbers, and improve the general aspect of the piece for the same reason, as the stanzas, that are inordinately deficient in smoothness.

§. 155. *Contrast the second general or primary principle.*

CONTRAST is another principle, by which our successive mental states are suggested ; or, in other terms, when there are two objects, or events, or situations of a character precisely opposite, the idea or conception of one is immediately followed by that of the other. When the discourse is of the *palace* of the king, how often are we reminded, in the same breath, of the *cottage* of the peasant ! And thus wealth and poverty, the cradle and the grave, hope and despair are found in publick speeches and in declamations from the pulpit almost always going together and keeping each other company. The truth is, they are connected together in our thoughts by a distinct and operative principle ; they accompany each other, not because there is any resemblance in the things thus associated, but in consequence of their very marked contrariety. Darkness reminds of light, heat of cold, friendship of enmity ; the sight of the conqueror is associated with the memory of the conquered, and when beholding men of deformed and dwarfish appearance, we are at once led to think of those of erect figure or of Patagonian size. Contrast, then, is no less a principle or law of association, than resemblance itself.

In those writers, who describe human action and suffering, and who make it a point to be true to nature, we have illustrations of the operations of this principle. In the memoir of the captivity of Mrs. Johnson, one of those deeply interesting sketches, which acquaint us with the sufferings of the early settlers of this country, and which are worthy of being read in as much as they teach us the worth of that peace and prosperity, which are now enjoyed, and the

amount of toil and suffering, which purchased them, we find the following instance of the power of this law of our constitution.—“After my feelings were a little quickened by warmth, my sad portion was brought me, consisting of the duck’s head and a gill of broth. As I lifted the unsavoury morsel with a trembling hand to my mouth, I cast my thoughts back a few days to a time, when from a board plentifully spread in my own house, I ate my food with a merry heart. The wooden spoon dropped from my feeble hand. The *contrast* was too affecting.”

There is a little book entitled the *LEPER OF AOST*, translated from the French of Lemaistre, and although we can pretend to no acquaintance with the character or writings of the author further than can be inferred from this specimen, we cannot doubt, that a tract of so much interest on such a subject must have come from a mind of no ordinary qualities. The book is mentioned here in consequence of

Note. The subject of those states of mind, which are called *apparitions* as will be seen by those, who consult that chapter, is left imperfect. The facts, which have been hitherto collected, are so few in number, as hardly to justify us in laying down general principles and offering solutions with much confidence. In the above-mentioned book, *the leper of Aost*, there are statements of intellectual operations, which agree with what is said in the chapter on *apparitions*, and illustrate the remarks there made. The writer represents the leper’s mind to be partially affected by the sufferings of the body and to have become altered from what it was. But these strange states of mental alienation occur chiefly in the night, when he is reposing on his pillow, but he tells us, they are not dreams, neither is he asleep. The statement admits of being compared in particular with §. 96 and 97. “I yield (says the leper) to extraordinary impressions, which I feel only in these unhappy moments. Sometimes it is, as if an irresistible power were dragging me to a fathomless abyss. Sometimes I see nothing but bleak forms; when I endeavour to examine them, they cross each other with the rapidity of lightning, increase in approaching, and soon are like mountains, which crush me under their weight. At other times, I see dark clouds rise from the earth around me; they come over me like an inundation, which increases, advances, and threatens to engulf me; and when I try to rise in order to free myself from these dreadful images, it seems as if I were retained by invisible ties, which enchain all my powers. You will perhaps believe this to be merely dreams; but I am not sleeping. I see always the same objects, and these horrible sensations exceed all my other sensations.” *Leper of Aost*, p. 17.

its philosophical truth in illustrating the effects of the principle of association now under consideration. Like all persons, affected with the leprosy, the subject of the disease is represented as an object of dread no less than of pity to others, and while he is an outcast from the society of men, he is a loathsome spectacle even to himself. But what is the condition of his mind? What are the subjects of his thoughts? The tendencies of his intellectual nature prevent his thinking of wretchedness alone. His extreme misery aggravates itself by suggesting scenes of ideal happiness, and his mind revels in a paradise of delights, merely to give greater intensity to his actual woes by contrasting them with imaginary bliss.—“I represent to myself continually (says the Leper) societies of sincere and virtuous friends; families, blessed with health, fortune, and harmony. I imagine, I see them walk in groves, greener and fresher, than these, the shade of which makes my poor happiness; brightened by a sun more brilliant, than that, which sheds its beams on me;—And their destiny seems to me as much more worthy of envy, in proportion as my own is the more miserable.”

§. 156. *Practical and moral applications of this principle.*

The remarks made in the preceding section on the LEPER OF AOST, naturally lead us to offer some brief observations on the practical and moral results of this law of association.

FIRST;—It operates as a powerful incitement to action, and may, therefore, in this respect be said to have a practical application.—A person finds himself poor, unknown, unhonoured. He is fully sensible of the position, which he holds, and it is a source of mortification and grief. But while he is deeply sensible of his poverty, obscurity, and want of influence, the busy interference of this law of his mental constitution constantly brings up in his mind the ideas of wealth, of honour, and of notoriety. As gilded edifices, although equally distant, appear nearer, than those of a less splendid exterior; so when the mind paints before

as bright images of future good, we think them almost within our grasp, because we so distinctly behold them. As, therefore, the principle of contrast suggests to us some future happiness, when we are sensible, that our present condition and enjoyment are below what they might and should be, it may fairly be laid down among its good, practical results, that it furnishes us with an incitement to exertion. And the more so, as the views, which it presents to the mind, are generally distinct, and their influence will, of consequence, be proportionally augmented.

SECOND ;—It may be considered as one of the moral results of this principle, that it operates as a source of happiness to us, whenever those objects, which we have any length of time been in pursuit of, are obtained. The principle of contrast leads us back to what we were before ; we look down from our present circumstances as from a height, and the altitude, which we now occupy, seems to be increased, by the recollection of our former depressions.

THIRD ;—Let it be remarked further, that CONSCIENCE owes a great part of the power, which it is able to exercise over the wicked, to this principle. It is from a knowledge of its tendencies, that solitary confinements have been so strongly recommended in publick penitentiaries. Separate the prisoner from his associates, leave his thoughts to follow each other as nature prompts, and what will be the subjects of them ? He will think of what he once was, and compare it with what he now is. He will place side by side a good name with a bad one, the charms of virtue with the deformities of vice, honour and dishonour, wretchedness and bliss, till the agitations of his own bosom, the lashes of his own conscience become far more terrible than chains, or any species of corporeal inflictions.

But it will be said, does not this principle of the mind operate in the same way in respect to the good, when they have been unfortunate ? It undoubtedly does. They think, and cannot do otherwise, of their former prosperity ; and their present ill success and depression appears the greater in consequence of such remembrances. But happily they

are supported by a consciousness of rectitude under what might be otherwise insupportable. It is a remark of Goldsmith, expressed in his happy manner, that one of the noblest objects in the universe is a good man, struggling with adversity.

§. 157. *This principle of association the foundation of antithesis.*

In writers of acknowledged taste and discernment, we find the rhetorical figure of ANTITHESIS employed, which is the placing of two objects or ideas in opposition. The fact, that such writers occasionally employ this figure might lead us to suppose, (which is the truth,) that it has its foundation in the human mind, viz. in the principle of association, to which we give the name of contrast. In one of the tragedies of Southern we find certain expressions, which are here introduced not only in illustration of the general principle, but as happily exemplifying some remarks in the preceding section.

—————“ Could I forget
 “ What I have been, I might the better bear
 “ What I am destined to. I am not the first,
 “ That have been wretched ;—But to think how much
 “ I have been happier.—————

Here the present is placed in opposition with the past, and happiness is contrasted with misery ; not by a cold and strained artifice, but by the natural impulses of the mind, which is led to associate together things, that are the reverse of each other. I say not by a cold artifice but naturally ;—for what man ever was there, or can be, that has been cast down from the heights of fortune, whether it have happened with his guilt or his innocence, and does not most readily and unavoidably look back from his present depressed condition to his former prosperities ?

In the poem of the Pleasures of Hope there is this passage.

“ Yet at thy call the hardy tar pursued,
 “ Pale, but intrepid, sad, but unsubdued.

As paleness is an appearance of the countenance, which

is sometimes understood to indicate fear or cowardice, there is occasion given to mention the opposite; the mind naturally thinks of it. A similar remark will apply to the last clause of the stanza, and the whole passage is one of great ease and beauty, besides being spirited.

The often repeated eulogium of Mr. Burke on the philanthropick Howard is a fine instance of this figure, and shows to what good purpose it may be applied on suitable occasions by persons of genius.—“He has visited all Europe,—not to survey the sumptuousness of palaces, or the stateliness of temples; not to make accurate measurements of the remains of ancient grandeur, nor to form a scale of the curiosity of modern arts, nor to collect medals or collate manuscripts;—but to dive into the depths of dungeons; to plunge into the infection of hospitals; to survey the mansions of sorrow and pain; to take the gauge and dimensions of misery, depression, and contempt, to remember the forgotten, to attend to the neglected, to visit the forsaken, and compare and collate the distresses of all men in all countries.”—This figure of rhetorick, therefore, being founded in our mental constitution, is sometimes employed with success, but whenever there is such frequency in the use of it, as to betray artifice rather than natural emotion, it loses its effect, and becomes a vice rather than an excellence in style.

Antithesis is frequently employed, and to very good purpose, in short, moral sayings, and in any writings whatever, which purposely adopt the concise and emphatick method of aphorisms. It is a great object with writers of this kind to have their sayings remembered. In throwing them into the form of antitheses, they afford great help to the memory, because when one part of the aphoristick sentence is known, the power of association, operating by the principle or law of contrast, immediately calls up the contrasted or parallel part of it.

§. 158. *Contiguity the third general or primary principle,*

Those thoughts and feelings, which have been connected together by nearness of time and place, are readily suggested by each other ; and, consequently, contiguity in those respects is rightly reckoned, as another and third primary principle of our mental associations. When we think of Palestine, for instance, we very readily and naturally think of the Jewish nation, of the patriarchs, of the prophets, of the Saviour, and of the apostles, because Palestine was their place of residence, and the theatre of their actions. So that this is evidently an instance, where the suggestions are chiefly regulated by proximity of place. When a variety of acts and events have happened nearly at the same period, whether in the same place or not, one is not thought of without the others being closely associated with it, owing to proximity of time ;—When, therefore, the particular event of the crucifixion of the Saviour is mentioned, we are necessarily led to think of various other events, which occurred about the same period, such as the treacherous conspiracy of Judas, the denial of Peter, the conduct of the Roman soldiery, the rending of the veil of the temple, and the temporary obscuration of the sun.

The mention of Egypt suggests the Nile, the Pyramids, Cæsar, Cleopatra, the battle of Aboukir. The naming of the AMERICAN REVOLUTION immediately fills the mind with recollections of Washington, Greene, and many of their associates, whose fortune it was to enlist their exertions in behalf of freedom in the same country and at the same period.

The following passage from captain King's continuation of Cooke's last voyage furnishes a remarkable example of the operations of this principle ;—" While we were at dinner in this miserable hut, on the banks of the river, Awatska, and the guests of a people, with whose existence we had before been scarce acquainted, and at the extremity of the habitable globe, a solitary, half-worn, pewter spoon, whose shape was familiar to us attracted our attention ; and, on examination, we found it stamped on the back with

the word, LONDON. I cannot pass over this circumstance in silence out of gratitude for the many pleasant thoughts, the anxious hopes, and tender remembrances it excited in us. Those, who have experienced the effects, that long absence, and extreme distance from their native country, produce in the mind, will readily conceive the pleasure such a trifling incident can give."—The beauty of this illustration consists not so much in the city or place having been suggested in consequence of their seeing its name impressed on the pewter spoon, although this may be supposed to have happened on the principle of contiguity, as in the circumstance, that such a multitude of other pleasing recollections thronged around the memory of that place. When they thought of London, they thought of their homes,—they thought of the inmates of those homes,—they thought of a thousand incidents, which they had there witnessed ;—a striking illustration of the degree of importance, which may be accumulated on the most trivial circumstance, when that circumstance can be made to connect itself effectually with any general principles of our mental constitution.

That, which we have set down, as the third general law of mental association, is more extensive in its influence than any others. It has been remarked with truth, that proximity in time and place forms the whole calendar of the great mass of mankind. They pay but little attention to the arbitrary eras of chronology ; but date events by each other, and speak of what happened at the time of some dark day, or of some great eclipse, or of some war or revolution, or when one neighbour built a house, or another lost a child. The practice of associating a considerable number of facts with some place, or with some event too prominent and wonderful to be easily forgotten, is the great and almost the only instrument, which the mass of people employ in retaining the multitude of particulars of a personal or local nature.

§. 159. *Cause and effect the fourth primary principle.*

There are certain facts or events, which hold to each other the relation of invariable antecedence and sequence. That fact or event, to which some other one sustains the relation of constant antecedence, is in general called *an effect*;—And that fact or event, to which some other one holds the relation of invariable sequence, has in general the name of a *cause*. Now there may be no resemblance in the things, which reciprocally bear this relation, there may be no contrariety, and it is by no means necessary, that there should be contiguity in time or place, as the meaning of the term, contiguity, is commonly understood. There may be CAUSE and EFFECT without any one or all of these circumstances. But it is a fact, which is known to every one's experience, that when we think of the cause in any particular instance, we naturally think of the effect, and, on the contrary, the knowledge or recollection of the effect brings to mind the cause;—And in view of this well-known and general experience, there is good reason for reckoning CAUSE and EFFECT among the general principles of our mental associations. What we here understand by principles or laws will be recollected, viz. The general designation of those circumstances, under which the regular consecution of mental states occurs.

It is on the principle of cause and effect, that when we see a surgical instrument or any engine of torture, we have an idea of the pain, which they are fitted to occasion, and for a moment are tempted to imagine, that we ourselves are partially the subjects of it. The sight of a wound, inflicted however long before, suggests to us the instrument, by which it was made. When we witness any of our fellow beings in distress, we naturally think of the particular cause of it, if we know what it is; and, if we are ignorant, we make it a subject of inquiry. When we have good news to communicate, we please ourselves with the thought of the joy, which it will occasion, and the bearer of afflictive tidings cannot but anticipate the grief, which the annunciation of them will produce.

§. 160. *Secondary principles of mental association.*

There are a variety of circumstances, which modify and slightly control the influence of the general laws or principles of association, and these by way of distinction are called **SECONDARY**. They are as follows ;—

(1) Our mental states will, in the first place, be more or less readily associated, according as they existed together for a greater or less length of time at first. Innumerable objects pass before us, which but very slightly arrest our attention ; & although a connection is formed among them by the general principles of association, the connection is weak and easily broken, and always of short duration. We cannot, therefore, in general rely on the future remembrance of objects, unless we feel so much interest in them, as to lead us to dwell on them for some time.—(2) The probability of our mental states being associated by the general principles, will depend in some measure, secondly, on the character of the original feelings, and will be greater or less, according as those feelings were *more or less lively*. Bright objects are more readily recalled, than faint or obscure ; also great joys and sorrows, while the many slight pleasures and pains, which are constantly occurring, are almost instantly forgotten.

(3) The parts of any mental train are the more readily suggested, thirdly, in proportion as they have been the *more frequently renewed*. Having read a sentence a number of times, we find ourselves able to repeat it out of book, which we could not do with merely reading it once.

(4) In the fourth place, our trains of thought and emotions will be found to be more or less strongly connected, according as they are *more or less recent*. We remember many incidents, even of a trifling nature, which occurred to-day or the present week, while those of yesterday or of last week are forgotten. There is an exception to this law, which should be mentioned. The associated feelings of old men, which were formed in their youth and the early part of manhood, are more readily revived, than those of later origin. This point will be further remarked on in

the chapter on MEMORY. This exception, however, it may be observed here, does not hold universally, even in the case of extreme age. The general rule holds, when the time is not extended far back. Events, which happened but a few hours before, are remembered, while there is an utter forgetfulness of those, which happened a few weeks or even days before.

(5) Our feelings, in the fifth place, are associated more strongly, as each has coexisted *less* with other feelings. When we have heard a song but from one person, it can scarcely be heard by us again without recalling that person to our memory. If we have heard the same words and air frequently sung by others, there is much less chance of this particular suggestion.

(6) The primary or general laws of association are modified, in the sixth place, by diversities in temper and disposition.—In the minds of two persons, the one of a cheerful, the other of a gloomy disposition, the trains of thought will be very different. This difference is finely illustrated in those beautiful poems of Milton, *L'ALLEGRO* and *IL PENSEROSO*. *L'ALLEGRO* or the cheerful man finds pleasure and cheerfulness in every object, which he beholds;—The great sun puts on his amber light, the mower whets his scythe, the milk-maid sings,

“ And every shepherd tells his tale
“ Under the hawthorn in the dale.

But the man of a melancholy disposition, *IL PENSEROSO*, chooses the evening for his walk, as most suitable to the temper of his mind; he listens from some lonely hillock to the distant curfew, and loves to hear the song of that “sweet bird,

—That shun’st the noise of folly,
“ Most musical, most melancholy.

Further;—Our trains of suggested thoughts will be modified by those temporary feelings, which may be regarded, as exceptions to the more general character of our dispositions. The cheerful man is not always cheerful, nor is the melancholy man at all times equally sober and contemplative. They are known to exchange characters for

whole days together, sometimes in consequence of good or ill health, or of happy or adverse fortune, and sometimes for causes, which cannot be easily explained. So that our mental states will be found to follow each other, with a succession, varying not only with the general character of our temper and dispositions, but with the transitory emotions of the day or hour.

(7) The trains of our suggestions are modified, in the seventh place, by our particular pursuit or profession in life.—When men of different pursuits or professions read a book, or hear a story, it will be seen, that they associate very different ideas with what they hear or read. If a traveller happens in their company, the man of letters immediately inquires what new works are about to be published in his country; the merchant is anxious to hear of the price of wheat or iron; the soldier insists on knowing, who is to take the place of the general or field-marshal lately displaced; and the politician requests an explanation of the late manifesto, or to be informed of the articles of the new constitution.

(8) The general or primary principles, by which our thoughts are connected together, are modified, eighthly, by an additional circumstance of so much influence, as to entitle it to be reckoned among the secondary laws of association; viz. *constitutional differences in mental character*.—Whether the origin of such differences, is to be referred to the mind itself, or to varieties in bodily temperament, is not necessary for our present purpose to be inquired into. Admitting the existence of such original diversities, we may suppose them, in the first place, to have the effect either of limiting and weakening, or of extending and augmenting the power of all the primary laws of association. In other words, they have a *general* influence, either favourable or unfavourable. The great varieties in the power of remembering, which are so often observed, may be attributed chiefly to this secondary law, and to that form of its influence, which has just been supposed, and is a proof of the correctness of the supposition.—But original, constitutional differences sometimes modify the influence of

the four general and primary laws of association in another and less impartial way; viz. by giving greater strength to one set of associations, than to another. Thus,—the mental associations, which are formed and sustained on the principle of resemblance or analogy, constitute one class; those, which are connected by the law of contiguity form another; and here it is, that we mark a distinction in the mental operations of men, which we think must be ascribed to original diversities in the intellectual organization. In one mind, for instance, the associations, which are ranked under one of these classes, are easily and readily suggested; the other class of associations is not;—but observe another person, in whom there is, as we contend, a constitutional difference, and we find, that it is just the reverse, and the class of associations, which, in the first instance, were easily suggested, are, in the latter case, suggested with great difficulty. One mind perceives the resemblances of objects, whether more or less obvious, and their relations of cause and effect; another mind of a different constitution observes only their contiguity in time and place. The fact is undeniable; and the solution, which we propose, as on the whole the least exceptionable, is, that there are in men certain natural differences attributable originally either to the mind exclusively, or to the influence of the physical system over the mind, or to both.

The laws of association may here properly be given in a condensed view, as follows. The general principles or laws of association, which are sometimes called the primary laws, are these, RESEMBLANCE, CONTRAST, CONTIGUITY in time and place, and CAUSE and EFFECT.—The secondary laws of association, which give such great variety to the results of the primary principles, are these—(1) Differences in the length of time of the co-existence of the associated feelings at first;—(2) Their greater or less degree of liveliness;—(3) The frequency of their renewal;—(4) The circumstance of their being more or less recent;—(5) The degree or extent of their co-existence with other feelings;—(6) Diversities in temper and disposition;—(7) The

influence of particular professions and pursuits ;—(8) Certain constitutional differences in mental character.

§. 161. *Genius nothing more than particular tendencies of association.*

Much has been said of genius. To those, who have been supposed to possess it, praise and admiration have been amply given, as if they were peculiarly-endowed. One man is said to have a genius for mathematicks, another for poetry ; and war also, and politicks, and mechanical employments have their geniuses. One hardly knows in what terms to convey an idea of it, and to do it concisely ; but the common definition has been this,—A talent or aptitude given us by nature, in order to excel in any one thing whatever. Whoever has those qualities, which, when applied to some particular art or science, enable their possessor to excel in it, is commonly called a man of genius.

Stated in other, and, as we conceive, in more philosophical language, genius is a constitutional tendency to form mental associations on the principles of RESEMBLANCE, of CONTRAST, and of CAUSE and EFFECT.

Persons, who show a constitutional inclination to form associations on the principle of CONTIGUITY in time and place, have minds of a lower grade, and are wanting in those penetrating and effective qualities, which are implied in genius. They may be good neighbours and useful citizens, and are especially fitted to excel in the manual practice of the mechanical arts, but it is beyond their power to give new beauties to literature, or new truths to science ; and they seem to be inevitably destined to plod in the paths of humble imitation.

Mention a forest or any wooded field to a man wanting in genius, and he will be likely enough to think of an aged and leafless oak. The thought of it will occur on the principle or law of contiguity, and, consequently, is not beyond the ordinary range of his intellectual power, But the man of genius, as in the description of Pompey in

the Pharsalia of Lucan, thinks with no less readiness of that aged and leafless oak, whenever he sees an old and heroick citizen, who stands forth amid the corruptions of his generation, the memorial of better times, and the prop of the commonwealth. But the thought occurs in the latter case on a different principle, that of resemblance or analogy. The former can become a poetical imitator, but the latter only can be the "gifted bard."

A man of no genius might consistently with the law, by which his associations are chiefly regulated, think of meteors, when walking abroad on a cloudy and sultry night; but would by no means be likely to, on merely seeing one of his aged neighbours with a long beard and hair floating in the wind. But how different are the associations in the mind of the author of that sublime poem

THE BARD !

" Robed in the sable garb of woe,
 " With haggard eyes, the poet stood ;
 " Loos'd his beard, and hoary hair
 " Streamed, like a meteor, to the troubled air.

What, therefore, constitutes poetical genius, that intellectual peculiarity, which lays the foundation for a reputation of that kind, is a constitutional tendency to connect together the states of mind in the way, which has been asserted. The subject will appear the clearer when looked at in connection with the remarks in the preceding section on the eighth secondary law of association.

It is to be further observed, that philosophical genius is essentially the same with poetical. Men may be called philosophers, because they have by great industry learnt the discoveries, which others have made, and the inventions, of which they have been the authors. They may imitate their predecessors ; they may employ the same means, which have been employed before, and come to the same results ; but learning and a high reputation do not necessarily imply genius ; so that, if they are philosophers, they are not philosophical geniuses.

GENIUS implies a mind, that will pass from causes to effects, and from effects to causes in cases, where it has not been taught by others ; that, with an almost intuitive read-

ness, is able to draw a parallel between the qualities of objects, without being limited to the circumstances of time and place, and that can deduce important conclusions before unknown from analogies in those things, which have come under its notice.

But if the qualities of genius be originally the same, both in philosophy and poetry, it may be asked, how happens it, that men devote themselves to pursuits so different in their character and results? The most obvious reply, is, that we are influenced by a great variety of circumstances, and are not unfrequently influenced by them, when we are ourselves not fully sensible of it;—such as the mental character of those, with whom we associate, local scenery, natural disposition, climate, government, early reading, &c. These give a direction to those qualities, which constitute genius; and it happens, in this way, that of those persons, whose mental capabilities were originally the same, one gives himself to the science of laws, another to natural philosophy, another to poetry, another to some other of the fine arts.

These views readily suggest an explanation of differences in degrees or strength of genius. There may be a tendency in different individuals to form associations on laws, which involve the resemblances and nature of objects, rather than on the law of mere contiguity; and this is the prominent circumstance in securing to them the character in question. But it does not follow, that it exists in the same degree and with the same strength in all. In some it is more, in others less. To a few the power of perceiving the analogies, and dissimilarities, and general relations of things is exceedingly great;—and it is to these alone that we can rightly give the credit of *great* geniuses, of being the “lights of their age.”

NOTE. Genius in the philosophical sciences makes itself known by inventions and discoveries. But there is a difference between the two. Mr. Stuart, in remarking on invention in the arts and sciences, draws a distinction between inventions and discoveries which he supposes to be correct and well founded, and is peculiarly happy in his

illustrations. Rather than run the chance of a better opportunity hereafter, we insert his remarks here.

"Before we proceed, it may be proper (says Mr. Stuart) to take notice of the distinction between Invention and Discovery. The object of the former, as has been frequently remarked, is to produce something which had no existence before; that of the latter, to bring to light something which did exist, but which was concealed from common observation. Thus we say, Otto Guericke invented the air-pump; Sanctorius invented the thermometer; Newton and Gregory invented the reflecting telescope: Galileo discovered the solar spots; and Harvey discovered the circulation of the blood. It appears, therefore, that improvements in the Arts are properly called *inventions*; and that facts brought to light by means of observation, are properly called *discoveries*.

Agreeable to this analogy is the use which we make of these words, when we apply them to subjects purely intellectual. As truth is eternal and immutable, and has no dependence on our belief or disbelief of it, a person who brings to light a truth formerly unknown, is said to make a discovery. A person, on the other hand, who contrives a new method of discovering truth, is called an inventor. Pythagoras, we say, discovered the forty-seventh proposition of Euclid's first book; Newton discovered the binomial theorem: but he invented the method of prime and ultimate ratios; and he invented the method of fluxions.

In general, every advancement in knowledge is considered as a discovery; every contrivance by which we produce an effect, or accomplish an end, is considered as an invention. Discoveries in science, therefore, unless they are made by accident, imply the exercise of invention; and, accordingly, the word *invention* is commonly used to express originality of genius in the sciences, as well as in the arts."

§. 162. *Dependence of transitions in style on association.*

It requires skill rightly to manage the TRANSITIONS in a discourse or poem, to conduct the hearer or reader from

one topick to another without violence to his feelings, and without injury to the natural order, clearness, and interest of the subject. No transitions seem to be admissible, but such as are suggested by association, either by the primary laws alone, or as they are modified by the secondary laws. But when that power holds out a number of ways, in which the passing from one topick to another can be effected, the writer has an opportunity to discover his skill in the selection.

In Goldsmith's poem of the Traveller, the nature of the subject requires frequent transitions, and they are happily managed. In one part of his poem, he describes the descendants of the Romans in their state of effeminacy and debasement; but how does it happen, that immediately after he undertakes a description of the character of the Swiss? In speaking of the present inhabitants of Italy, he sees hardly any thing but indications of indolence and luxury,—but little of vigour, of hardship, of ancient truth. He is led, therefore, by the principle of contrast, to think of conduct, characters, and situations directly the reverse. To think, then, of the Swiss under such circumstances seemed to be almost unavoidable;

" My soul turn from them—turn we to survey,
 " Where rougher climes a nobler race display,
 " Where the bleak Swiss their stormy mansions tread,
 " And force a churlish soil for scanty bread.

§. 163. *Of associations suggested by present objects of perception.*

Associated thoughts and emotions, when made to pass through the mind by some sound, which the ear has caught, by some object, which has met the eye, or by any present object of perception whatever, are vivid and strong. Associations, which do not admit any of our present perceptions as a part of the associated train, cannot but impress us, as being in some measure airy and unsubstantial, however distinct. We deeply feel, that they are a part of the experiences of departed days, and which, in departing from us, have become almost, as if they had never been. But

let them partake of our present experience, of what we now feel and know to exist, and they seem to gain new strength; the remembrances are not only distinct, but what was airy and unsubstantial fades away, and they have life, and power, and form.

How often, in the wanderings of life, are we led by some apparently accidental train of thought to the recollection of the residence of our early years and of the incidents, which then occurred! The associations are interesting, but we find it difficult to make them permanent, and they are comparatively faint. But let there be connected with that train of thought the present sound of some musical instrument, which we then used to hear, and of our favourite tune, and it will be found, that the reality of the tune blends itself with the airy conceptions of the mind, and, while we kindle with an illusive rapture, the whole seems to be real. Some illustrations may tend to make these statements more clear and to confirm them.

It is related in one of the published Lectures of Dr. Rush, that an old native African was permitted by his master, a number of years since, to go from home in order to see a lion, that was conducted as a show through the state of New Jersey. He no sooner saw him, than he was so transported with joy, as to express his emotions by jumping, dancing, and loud acclamations, notwithstanding the torpid habits of mind and body, superinduced by half a century of slavery. He had known that animal, when a boy in his native country, and the sight of him suddenly revived the memory of his early enjoyments, his native land, his home, his associates, and his freedom.

There is in the same writer another interesting instance of the power of association, in which he himself had a part, and which will be given in his own words.—“During the time I passed at a country-school, in Cecil County, in Maryland, I often went on a holiday, with my schoolmates, to see an eagle’s nest, upon the summit of a dead tree in the neighbourhood of the school, during the time of the incubation of that bird. The daughter of the farmer, in

whose field this tree stood, and with whom I became acquainted, married, and settled in this city about forty years ago. In our occasional interviews, we now and then spoke of the innocent haunts and rural pleasures of our youth, and, among other things, of the eagle's nest in her father's field. A few years ago, I was called to visit this woman when she was in the lowest stage of a typhus fever. Upon entering her room, I caught her eye, and, with a cheerful tone of voice, said only, *The eagle's nest*. She seized my hand, without being able to speak, and discovered strong emotions of pleasure in her countenance, probably from a sudden association of all her early domestic connexions and enjoyments with the words I had uttered. From that time she began to recover. She is now living, and seldom fails, when we meet, to salute me with the echo of the 'eagle's nest.' "

From such illustrations it would seem to be sufficiently clear, that, whenever associated thoughts and emotions are connected with any present perceptions, they are peculiarly strong and vivid. They steal into all the secret chambers of the soul, and seemingly by some magick power impart a deeper intensity to its feelings, and give to the shadowy world of memory the stability of real existence. There are two causes, why such associated feelings should possess more than ordinary strength and vividness.

(1) The particular train of thought and feeling, which is excited in the mind, continues longer than in other cases, in consequence of the greater permanency and fixedness of the present objects of perception, which either suggested the train, or make a part of it. So long as the lion was permitted to remain in the sight of the aged African, so long without interruption was the series of delightful thoughts kept up within him. The bright images, which threw him into such raptures, and awoke stupidity itself, were not fleeting away with every breath, but remained permanent.

The sick lady of Philadelphia saw the physician, with whom she had been acquainted in the early part of life. By the mention of the eagle's nest, he vividly recalled the

scenes of those young days. But it was the presence of the person, whose observation had given rise to the train of association, which contributed chiefly to keep it so long in her thoughts. Had it occurred merely from some accidental direction of her own mind, without any present object, which had made a part of it, no doubt her sufferings or other circumstances would soon have banished it.

(2) The second cause of the increased vividness of associations, suggested by a present object of perception or combined with it, is this, viz. The reality of the thing perceived is communicated in the illusions of the moment to the thing suggested.—The trees of the desert were the hiding place of the lion, when the African saw him in early life; and now, after the lapse of so many years, he imagines, that, in the quickened eye of his mind, he beholds the forests of his native soil, because he has before him the proud and powerful animal, that crouched under their shade. And the presence of the monarch of the forest gives a reality not only to woods and deserts; but by a communication of that, which is real to that, which is merely suggested, the whole group of his early experiences, as well as the sight of the animal, which made a part, are revived, and have virtually a real, renewed existence.

These remarks may be properly applied to explain a recent, strong manifestation of feeling in a whole people. The citizens of the United States have a multitude of patriotick associations, connected with their revolutionary war. But those associations, owing to length of time, were by degrees growing dim on the minds of the aged, and made a still more diminished impression on those of the young. In the years 1824—5, La Fayette, the only surviving revolutionary officer of the grade of major-general, came on a visit to this country to see once more the people, for whom he had fought in his youth. All classes flocked to behold him, and to grasp his hand. Nothing could exceed the deep feeling, which existed from one part of the republick to the other. But it was not the individual merely, however strongly the people were attached to him, that awoke such a happy and lofty enthusiasm. All the events and all

the characters of the revolution exist to the present generation in associated states of the mind, and, as La Fayette had long formed a part in those ideal associations, when we were so fortunate, as to see him with our own eyes and touch him with our own hands, the revolution then seemed in a new sense to be real, and all its scenes were *embodied* before us. All his associates in suffering and danger, all the renowned names that once fought by his side, were concentrated in himself, and he was in the midst of us the sole and illustrious representative of a long series of momentous events and of a host of heroick men.

In all the cases, which have been mentioned, the associated feelings were intensely powerful; a multitude of other instances, occurring indeed every day, illustrate the same idea, that they are strong and vivid in an unusual degree, when suggested by a present object of perception. The two circumstances, which have been mentioned, seem to be the most obvious and satisfactory reasons, which can be given in explanation of the fact.

These remarks suggest a rule of some practical consequence to writers of poems, romances, and other works of imagination. They should lay the scene of their works, where there are human beings, not in "Arcadia," nor in "Fairy Land." They should describe men, women, and human nature in its various forms, and local scenery, as they are; and then we can sympathize. We can at least say, that we have seen such beings as they describe, and perhaps that we have travelled in the very region of their residence and amid its natural scenery. Our personal experiences will give a permanency, and substantiality, and consequently a greater interest to the images of the writer, which we might otherwise reject, as being unnatural, or at least affected, and better suited to other classes of beings, than ourselves.

§. 164. *Habits may be resolved into mental associations.*

The word, HABIT, as commonly employed, expresses that facility, which our mental operations or bodily actions acquire in consequence of practice. By long practice we

become so familiar with a certain succession of ideas, that the one not only infallibly suggests the others, but with peculiar quickness, and apparently without any effort of our own;—and, in the same manner, our actions are so closely connected by practice with the states of the mind, that the bodily movements will follow the thoughts without our being conscious of any effort of volition, previous to the active exertion. We apply the term *HABIT* to various classes of persons, to the dexterity of workmen in different manual arts, to the rapidity of the accountant, to the fluency of the extemporaneous speaker. The fact, that the facility, implied in *HABIT*, is owing to practice, we learn from experience.

In all mechanical arts and all cases, where there is a corporeal as well as mental effort, the effect of practice will be found to be partly on the mind, and partly on the body. The muscles, which are at such times employed, become stronger and more obedient to the will. The fact is well known, but we know not, that any one has been able to offer a satisfactory explanation.

The effect of practice on the mind seems to consist wholly in quickening the power of association. Practice is the repetition of a thing. The more frequently our associated trains of thought are repeated, the more readily they occur. This was stated in the third secondary law of association, which is this;—The parts of any mental train are the more readily suggested, in proportion as they have been the *more frequently renewed*. All intellectual habits, therefore, are nothing more than spontaneous mental suggestions, which have become such by frequent repetition. Further remarks, connected with this subject, will be found in the chapter on *ATTENTION*.

§.165. *Historical remarks on the doctrine of association.*

Although the tendency of one idea or state of the mind to suggest another must have ever been so obvious as to be generally observed, it required something more than the ordinary powers of discernment and classification, to

hit upon those general principles, by which the associations are regulated. Aristotle, in treating of memory, speaks of these principles in part, and is the first, who is known to have laid down any general rules. He says, that the relations, by which we are led in seeking after or tracing out those thoughts, which do not at once occur, are chiefly three; RESEMBLANCE, CONTRAST, and CONTIGUITY.

There is an interesting passage in Cicero on the influence of association in the fifth book *DE FINIBUS*. His remarks illustrate particularly the results of the principle of contiguity. They also strikingly confirm the fact in the doctrine of association, that suggested trains of thought will be more vivid, when they are in some way connected with present objects of perception.

Mr. Locke in his *Essay on the Human Understanding* added a chapter in the fourth edition on the subject of association. This chapter, although it must be confessed to be a very imperfect one, compared with what has since been written on the subject, is mentioned with commendation by Dugald Stewart, and he thinks, it has contributed as much as any thing else in Locke's writings to the subsequent progress of intellectual philosophy. The first edition of the *Essay on the Human Understanding* was published in 1690.

Ernesti, in his *INITIA DOCTRINÆ SOLIDIORIS*, published in 1734, enters into the subject somewhat particularly. He begins with stating the fact of the existence of association, or that the states of the mind are in some way connected together. He then proceeds to give the general law, by which this connection or consecution of states happens, as follows;—Any thought or image in the mind has the power of suggesting the idea of some absent object. It may suggest one, that is in some respects similar to itself,—or one, of which the present is a part,—or one, which has been present together with it on some former occasion.

Mr. Hume gave much attention to this subject. In an *Essay on the association of ideas*, he has the following

passage.—“Though it be too obvious to escape observation, that different ideas are connected together, I do not find, that any philosopher has attempted to enumerate or class all the principles of association ; a subject, however, that seems worthy of curiosity. To me there appear to be only three principles of connection among ideas, viz. RESEMBLANCE, CONTIGUITY in time and place, and CAUSE and EFFECT.”

It would seem from this statement, that he was ignorant of the passage in Aristotle above referred to. He differs from the statement which we have preferred on the subject of the primary principles of association, in excluding contrast from the number of them. He considers contrast a mixture of resemblance and causation ; his arguments in support of his theory, which are examined in Brown's Lectures on the Mind, are rather specious than convincing.

The doctrine of association makes a considerable figure in the Observations on Man of Dr. Hartley. This work was published in the beginning of 1749. Dr. Hartley does not content himself with giving the mere facts of our mental operations, which are always valuable, however difficult they may be in some cases to be explained ; but undertakes also to point out the precise connection of the origin of those facts with certain previous states of the corporeal system. He supposes, that every impression on the senses, caused by an external object, is propagated from the external body to the brain by means of vibrations in the nervous system, or rather by means of the oscillating motion of vibratory particles or vibratiuncles in the nerves. He expressly compares the vibrations or the motions backwards and forwards to the oscillations of pendulums and the tremblings of the particles of sounding bodies. When the vibration antecedent to one idea is in any degree whatever coincident with the vibration of another idea, the recurrence of either of them will have the effect to cause the repetition of the other, and of course the repetition of the idea or mental state. In this way he has proposed to account, not only for the rise or origin of those ideas, which come into the mind from things external to us, but for the

existence of the great law of association. But his speculations on these points, which do not so much concern the facts themselves as their causation or physical history, have been in general regarded, as bordering too much on hypothesis to be particularly deserving of attention.

Almost all late writers on intellectual philosophy have more or less on the subject of association; and some, particularly Dugald Stewart, have written on it with much taste and eloquence. To this writer we are much indebted in this chapter, and also to the late Thomas Brown;—to the latter particularly for his valuable and original remarks on the secondary laws of association, for which he is entitled to great credit. Not, however, that we have exactly followed him in his arrangement. The views, which have been given both in respect to the primary and secondary laws of association, differ in some respects from his, as will be seen on comparison. Unhappily for the science, he was cut off from life before he was permitted to complete and give to the world in his own name his analysis of the mind. Had he lived, hardly too much could have been expected.

CHAPTER FOURTEENTH.

CASUAL CONNECTIONS OF THOUGHT.

§. 166. *Association sometimes misleads our judgments.*

There are some cases, where the power of association so misleads us, that we cannot easily form a correct judgment of the true nature of things. Every object of thought, in order to be fully understood, ought to be so much in our power, that we may examine it separately from all other objects. Whenever, therefore, it happens from any circumstances, that the power of association so combines one object of thought with another, that the object cannot readily be looked at and examined by itself, it so far has the effect to perplex and hinder correct judgment. It will be found, when we look into our minds, that there exist a few associations or combinations of thought of this kind, which are obstinate and almost invincible; and there are very many of a less degree of strength, but which have a considerable effect in disturbing the just exercise of the intellect, and require much care in their detection and eradication. The latter class will be examined at some length in the chapter on PREJUDICES;—some prominent instances of the former class will be considered here, and, for the want of a better phraseology, we shall arrange them together under the head of CASUAL CONNECTIONS OF THOUGHT.

Of these a number of instances deserve a special attention. To explain the origin and to correct the erroneous tendencies of all such connections of thought, although the number of such as we have now in view cannot be large, would occupy us too long. The examination of only two or three somewhat striking instances will throw light on the philosophy of the mind in general, as well as be of practical benefit.

§. 167. *Connection of our ideas of extension and time.*

EXTENSION is reckoned among the simple ideas, although it is derived from more than one sense ; it is, therefore, difficult to define it so as to make it more clear, than it has already become by each one's experience. It perhaps approaches the nearest to a definition to say, that it is the distance between the parts of the same object, where in the intermediate parts there is a continuity of the same substance.—We get the idea of TIME, which comes under the class of SIMPLE MODES, by considering any part of duration, as set or marked off by periodical measures, such as hours, days, or years. It is well known, whatever may be the cause of it, that people are generally in the habit of considering time, as a sort of modification of space or extension. This observation may not appear perfectly obvious at first. But the expressions, which we apply to intervals of duration, are an evidence of its truth.

We say *before* such a time or *after* such a time, the same as *before* or *after* any material object ;—we speak of a *long* or a *short* time with no more hesitation than of a long or short distance, of a long or short bridge, or railway, or any other object of extension. We utter ourselves precisely in the same way we should do, if we were certain of having detected some real analogy between the two, between length and shortness in material substances and what are called length and shortness in time. But it is not too much to say, that there is no such analogy, no such similitude ; nor is it worth while to anticipate, that we shall ever be able to detect such analogy or similitude, until we can apply the measures of feet, ells, roods, &c. to hours, and days, and weeks. How then can it be accounted for, that we apply terms nearly in the same way, as if this were the case, and, as if such measurements could be made ?

The strong association of these ideas has most probably arisen in this manner, viz., from our constantly measuring one of these quantities by the other. It is the common method to measure time by motion, and motion is measured

by extension. In an hour the hand of a clock moves over a certain space; in two hours over double the space, and so on.—No doubt it is convenient to apply the terms “long” and “short,” “before” and “after,” and others similar to time. We could not well dispense with them. But it ought to be remembered, if we would have right notions of things, that the application of those expressions has arisen from the mode in which we measure time, and that time and space or that modification of space which we call extension are essentially distinct in their nature.

§. 168. *Of high and low notes in musick.*

We speak of high and low in reference to notes in musick, the same as of the high or low position of material bodies. There is supposed to be some analogy between the relation, which the notes in the scale of musick bear to each other, and the relation of superiority and inferiority in the position of bodies of matter. But it is impossible to prove the existence of such analogy however generally it may have been supposed; and the supposition itself of its existence has no doubt arisen from a casual association of ideas, or, in the expressions placed at the head of this chapter, in a casual connection of thought. A proof of this association of ideas being purely accidental is, that an association, the very reverse of this, was once prevalent;—We allude to the observation of Dr. Gregory in the preface to his edition of Euclid’s works, that the more ancient Greek writers considered the grave sounds as high, and the acute ones as low. The present mode of speaking on the subject is of more recent origin; but at what time and in what way it was introduced cannot be asserted with confidence. In the preface just referred to, it is, however, observed, that the ancient Greek custom of looking upon the grave sounds as high and the acute as low, precisely the reverse of what is now common, continued down until the time of Boethius. It has been conjectured with some ingenuity, that this connection or associa-

tion of thought among the Greeks and Romans, for it was equally prevalent among both, might have been owing to the construction of their musical instruments. The string, which sounded the grave or what we call the low tone, it has been conjectured, was placed highest, and that, which gave the shrill or acute, had the lowest place. If this conjecture could be ascertained to be well founded, it would strikingly show, from what very slight causes strong and permanent associations often arise. It is hardly necessary to observe, that it is important to examine the origin and progress of such associations, in order that we may correct those erroneous and illusive notions, which will be found to be built upon them.

§. 169. *Connection of ideas of extension and colour.*

There is no necessary connection between colour, as the term is commonly employed by philosophers, and extension. The word COLOUR properly denotes a sensation in the mind; the word EXTENSION, the quality of an external, material object. There is, therefore, no more natural connection and no more analogy between the two, than there is between pain and solidity. And yet it so happens that we never have the sensation or idea of colour without at the same time associating extension with it; we find them, however different they may be in their nature, inseparable in our thoughts. This strong association is formed in consequence of our always perceiving extension at the very time, in which the sensation of colour is excited in the mind. The perception of the one, and the sensation of the other have been so long simultaneous, that we have been gradually drawn into the belief, that, on the one hand, all colour has extension, and, on the other, all extension has colour. But what we call colour being merely a state of the mind, it is not possible, that it should with propriety be predicated of any external material substances. Nor is it less evident, if colour be merely a sensation or state of the mind, that matter can exist, and does exist without it.

But what has been said will not satisfy all the queries, which may be started on this point, unless we remark also on the ambiguity in the word COLOUR. The view, which has been taken of the connection between colour and extension, is founded on the supposition, that colour denotes a sensation of the mind and that merely. It seems to be supposed by some writers, that the word colour has two meanings, and that it is thus generally understood ;—(1) It denotes that disposition or arrangement in the particles of matter, which not only causes the rays of light to be reflected, but to be reflected in different ways ;—(2) It denotes that mental sensation, which follows, when the rays have reached the retina of the eye. When people use the term with this diversity of signification they can say with truth, that external bodies have colour, and also that colour is a sensation of the mind. It may be said also in the first sense of the term, which has been mentioned, that colour has extension, because particles of matter have extension. But it is by no means evident, that people generally make this distinction, although some may. They commonly mean by the term the *appearance* of colour or the sensation in the mind ; and they no doubt do in general regard this appearance or sensation, as belonging to external objects, as being in some sense a part of those objects, and as having extension. How erroneous this supposition is, has already appeared !

§. 170. *Whether there be heat in fire, &c.*

The questions, Whether there be heat in fire, coldness in snow, sweetness in sugar, and the like, seem well suited to the inquisitive and nicely discriminating spirit of the scholastick ages. Whether bodies have colour, a point of inquiry in the last section, is another question of essentially the same character. Although well suited to exercise the ingenuity of the Schools, they are far from being without importance in the inquiries of the better philosophy of later times. If these questions concern merely the matter

of fact, if the inquiry be, What do people think on these points? It admits of different answers. But this is of less consequence to be known, than to know what is the true view of this subject? The following, we think, is the view, which should be taken. If by heat, cold, and taste in bodies, we merely mean, that there is this or that disposition or motion in the particles, then it must clearly be granted, that fire is hot, that snow is cold, and sugar is sweet. But if by heat is understood what one feels on the application of fire to the limbs, or if by sweetness is understood the sensation of taste when a sapid body is applied to the tongue, &c., then fire has no heat, sugar no sweetness, and snow is not cold. These states of the mind can never be transformed into any thing material and external. The heat or the cold which I feel, and the different kinds of tastes are sensations in the soul, and nothing else.

§. 171. *Whether there be meaning in words?*

We say in our common discourse, that there is meaning in words, that there is meaning in the printed page of an author; and the language is perhaps sufficiently correct for those occasions, on which it is ordinarily employed. We do not deem it necessary to object to the common mode of speaking in this particular instance, nor to undertake to propose any thing better. But there is here an association of ideas, similar, both in its nature and its effects, to that existing between extension and colour already remarked upon.

When objects external to us are presented to the sense of sight, there is immediately the sensation of some colour. This sensation we have been so long in the habit of referring to the external object, that we speak and act, as if the colour were truly in that object and not in ourselves; in the language of D'Alembert, as if the sensation were transported out of the mind, and spread over the material substance. And it is not until we take some time to reflect, and until we institute a careful examination, that we become satisfied of our error.

In the same way when we look upon the page of an author we say it has meaning, or that it is full of thought; whereas in truth, in consequence of a long continued and obstinate association, of which we are hardly sensible ourselves, we transport the meaning or thought out of ourselves and spread it upon that page. The thought or meaning is in ourselves, but is placed by us, through the means of a casual but very strong association, in the written marks, which are before us. All the power, which the words have, results from convention, or, what is the same thing, exists in consequence of certain intellectual habits, formed in reference to those words. It is these habits, formed in reference to them, it is this mental correspondence, which gives these characters all their value; and without the mind, which answers to and which interprets them, they could be considered as nothing more than mere black strokes drawn upon white paper, and essentially differing in nothing from the zigzag and unmeaning delineations of a school boy on the sand. As all the beautiful variety of colours do not and cannot have an existence without the mind, which has sensations of them or perceives them, so words are useless, are unmeaning, are nothing without the interpretations of an intellect, that has been trained up so as to correspond to them. Otherwise there would be meaning in the unknown inscriptions on the bricks brought from Babylon,—there would be meaning in the hieroglyphical figures on the monuments of Egypt,—they would not stare upon us with the unintelligent vacancy of an idiot. They are now without meaning, without life and intelligence, for this reason and this only, that the minds, which once corresponded to them, and which gave them life and intelligence, are no more. By association, therefore, we refer the meaning to the written characters or words, when in truth it is in the mind, and there alone.

§. 172. *Benefit of examining such connections of thought.*

It is of great importance to us to be able to separate ideas, which our situation and habits may have intimately combined together. To a person, who has this power in a considerable degree, we readily give the credit of possessing a clear and discriminating judgment. And this mental characteristick is of great consequence not only in pursuing the study of intellectual philosophy, but in the conduct of life. Such an ability is of no less and probably of greater value, than mere acuteness of reasoning or quickness of invention; although the latter may be considered more imposing and brilliant qualities. The associations of thought, which have been mentioned in this chapter, are so intimate or rather almost indissoluble, that they try and discipline the mind in this respect,—they teach it to discriminate. They are worthy to be examined, therefore, and to be understood, not only for the immediate pleasure, which they afford in the discovery of our errors; but also because they have the effect of training up one's powers to some good purpose. Let a person be accustomed to making such discriminations as are implied in fully understanding the instances in this chapter, and he acquires a readiness, which is not easily outwitted; he trains himself to such a quickness of perception in finding out what truly belongs to an object and what does not, as will not allow him to be imposed upon by that confusion of ideas, which in so many cases distorts the judgments of the multitude.

§. 173. *Power of the will over mental associations.*

In view of what has been said in this and the preceding chapters, the inquiry naturally arises, What is the degree of influence, which we are able to exercise by mere will or volition over associated trains of thought? The answer to be given to this inquiry is, that we have no direct influence or power over them;—there is a constant train of ideas, but their succession, their coming and departing depends on causes beyond our immediate voluntary con-

trol. The truth of the general statement, that we cannot produce or call up an idea by a mere direct act of the will, and that, consequently, trains of ideas are not directly under its control, cannot but appear quite evident on a little reflection. We never can will the existence of any thing without knowing what it is which we will or choose. This requires no further proof than is contained in the proposition itself. Therefore, the expressions, to will to have a certain thought or train of thought, clearly imply the present existence of that thought or train ; and, consequently, there can be no such thing as calling up and directing our thoughts by immediate volition.

To this view of want of direct voluntary power over our associated ideas and to the argument in support of it, those mental efforts, which we term recollection or intentional memory, have been brought up as an answer. In cases of intentional memory it will be said, an object or event is remembered, or, in other words, an idea or train of ideas is called up, by mere volition or choice. To this objection we make this reply. It is evident, before we attempt or make a formal effort to remember the particular circumstances of an event, that the event itself in general must have been the object of our attention. There is some particular thing in all cases of intentional remembrance, which we wish to call to mind, although we are totally unable to state what it is ; but we know, that it is somehow connected with some general event, which we already have in memory. Now by revolving in mind the great facts or outlines of that event, it so happens, that the particular circumstance, which we were in search of, is called up. But certainly no one can say, that this is done by a direct volition ;—so far from it, that nothing more is wanted to explain it, than the common principles of association. This statement is illustrated, whenever, in reciting an extract which we had committed to memory, we are at a loss for the beginning of a particular sentence. In such a case we naturally repeat a number of times the concluding words of the preceding sentence, and very soon we recall the sentence, which was lost ; not, however, by direct volition, but by association.

But we would not be understood to say, that the *will* possesses no influence whatever over our trains of thought ; its influence is very considerable, although it is not, as we have seen, immediate and direct.—(1) We have, in the first place, the power of checking or delaying the succession of ideas. We are not, indeed, enabled by our power in this respect either directly to call up or to banish any one or any number of our thoughts. But the consequence is, a variety of trains of thought are suggested, which would not have been suggested, had it not been for the circumstance of the original train being delayed. Thus, in the course of our mental associations, the name of Sir Isaac Newton occurs;—we check the current of our thoughts at that name, and we feel and are conscious, that we have within us the power to do so. While we delay upon it, a variety of series of ideas occurs. At one moment, we think of eminent mathematicians and astronomers, for he himself was one ; at another, we think of those contemporaries, who were his particular friends, whatever their rank in science, because they lived at the same time ; a moment after, our minds dwell upon some striking incidents in his life or some marked features in his social or intellectual character ;—and again, we may be led to think, almost in the same instant, of some proposition or demonstration, which had once exercised his patience and skill. In consequence of delaying a few moments on the name or rather on the general idea of the man, these different trains of thought are presented ; and we can evidently fix our minds upon one of these subjects, if we choose, and dismiss the others. This is one way, in which by choice or volition we are able to exercise a considerable indirect power over our associations.

(2) We acquire, in the second place, great power over our associations by HABIT ; and, as no man forms such habit without willing or choosing to form it, we have here another instance of the indirect power of volition. By the term, habit, when it is applied to our mental operations, we mean that facility or readiness, which they acquire by being frequently repeated. (See §. 164.) The

consequence of repetition or frequent practice is, that certain associations are soon very much strengthened, or that a facility in them is acquired. It is a well known fact, that almost any person may become a punster or rhymer by taking the pains to form a habit, that is, by increasing the facility of certain associations by frequent repetition. By punning we understand the power of readily summoning up, on a particular occasion, a number of words different from each other in meaning, but resembling each other, more or less, in sound.—That facility of association, which is acquired by frequent repetition and which is expressed by the word **HABIT**, is the great secret of fluency in extemporaneous speaking. The extemporaneous speaker must, indeed, have ideas; no modification of association whatever can supply the place of them. But his ability to arrange them in some suitable order and to express them in words without previous care and effort, is the result, in a great measure, of habits of association.

CHAPTER FIFTEENTH.

OF ATTENTION.

§. 174. *Nature of attention and different degrees of it.*

Without considering it necessary to speak of attention as a separate intellectual power or faculty, as some may be inclined to do, it seems to be sufficient to say, that **ATTENTION** expresses the state of the mind, when it is steadily directed, for some time, whether longer or shorter, to some object of sense or intellect, exclusive of other objects. When we say, that any thought or idea receives attention, it seems to be the fact, as far as we are able to determine, that the thought or idea, or whatever is the object of that attention, remains in the mind for a certain period, and that all other thoughts are, for the time being, shut out.

It follows from this view of it, that attention may be very great or very small, in a very high or a very slight degree, according as the mind is occupied with any thought or subject for a greater or less time. When the view of the mind is only momentary, a mere glance; then the attention is said to be very slight;—but when it bends itself upon a thought or series of thoughts for any considerable length of time and refuses during that period to attend to any thing else whatever, then the attention is said to be intense.

Of instances of people, who are able to give but slight attention to a subject, who cannot bring their minds to it with steadiness and power, we every where find multitudes; and there are some instances, where this ability has been possessed in such a high degree as to be worthy of notice. There have been mathematicians, who could investigate the most complicated problems amid every variety and character of disturbance. The chess-player Philidor could direct three games of chess at the same time, of one of which only he required ocular inspection, the moves of the other two being announced to him by an assistant.—Of power in controlling the attention, Julius Cæsar has sometimes been mentioned as an instance; while writing a dispatch, it is said, that he could at the same time dictate four others to his secretaries, and, if he did not write himself, could dictate seven letters at once.

§. 175. *Of the dependence of memory on attention.*

There seems to be no fact in mental philosophy more clearly established than this, that memory depends on attention; that is, where attention is very slight, remembrance is weak, and where attention is intense, remembrance continues longer. The following statements go to prove and illustrate this remark.—(1) Let a person be much engaged in conversation or occupied with any very interesting speculation, and the clock will strike in the room where he is, apparently without his having any knowledge of it. He hears the clock strike as much as at any other time, but, not attending to the perception of sound

and having his thoughts directed another way, he immediately forgets. —(2) In the the course of a single day persons, who are in the habit of winking, will close their eyelids perhaps thousands of times, and as often as they close them, will place themselves in utter darkness. Undoubtedly they are conscious at the time both of closing their eyelids and of being in the dark, but as their attention is chiefly taken up with other things, they have entirely forgotten it.—(3) Whenever we read a book, we do not observe the words merely as a whole, but every letter of which they are made up, and even the minute parts of these letters. But it is merely a glance; it does not for any length of time occupy our attention; we immediately forget, and with great difficulty persuade ourselves, that we have truly perceived the letters of the word. The fact, that every letter is in ordinary cases observed by us, may be proved by leaving out a letter of the word, or by substituting others of a similar form. We readily in reading detect such omissions or substitutions.

Many facts of this kind evidently show, as we think, that memory depends upon attention or rather upon a continuance of attention and varies with that continuance. Every one's general reading confirms this. Whenever we read a book, which does not particularly interest us, and which, in failing to interest us, leaves our thoughts to go astray upon other subjects, how very little is engraven in the recollection!—The facts, which have been given, not only go to evince the dependence of memory on attention, but show also, in a striking manner, the rapidity of our mental operations. The fact, that we notice every letter, and the shape of every letter, and combine them together in words, and still are not delayed in reading, but proceed from word to word without hesitation, gives a view of the mind, which cannot but astonish us. But as the subject of the rapidity of our mental operations, in attending to a variety of successive objects, which has thus been suggested, is one of much interest, we delay upon it here, and make a few further remarks.

§. 176. Of rapidity in attending to different objects.

The following illustration, in addition to others in the preceding section, may be given, to show the rapidity of the mind in giving its attention to different objects ;—it is stated by Mr. Hobbes in his political treatise of the *Leviathan*. He says, he was once in company, where the conversation turned on the English civil war. A person abruptly asked, in the course of the conversation, What was the value of a Roman denarius ? Such a question, so remote from the general direction of the conversation, had the appearance not only of great abruptness, but of impertinence. Mr. Hobbes says, that, on a little reflection, he was able to trace the train of thought, which suggested the question. The original subject of discourse naturally introduced the history of king Charles ; the king naturally suggested the treachery of those, who surrendered him up to his enemies ; the treachery of these persons readily introduced to the mind the treachery of Judas Iscariot ; the conduct of Judas was associated with the thirty pieces of silver, and as the Romans occupied Judea at the time of the crucifixion of the Saviour, the pieces of silver were associated with the Roman denarii. All these trains of thought passed through the mind of the person, who asked the question, in a twinkling ; and probably he himself, if he had been asked upon it, could not have told the precise connection of ideas, which led him aside from the original topick of discourse. This instance illustrates both the great rapidity of thought and the dependence of memory on attention.

The rapidity of thought is illustrated also, in a striking manner, in the case of an equilibrist, balancing a rod on his finger. To do this requires constantly not only the attention of his mind, but the observation of his eye. The part of the body, which supports the object, is never wholly at rest ; for, if it were, the object would no more stand upon it, than it would retain its position, if placed upright on a table. The equilibrist, therefore, watches every in-

clination of the object from the proper position, so as to counteract that inclination by a contrary movement. But, what is worthy of remark, he can balance not only a single rod in this way, but two or three upon different parts of his body, and, at the same time, balance himself on a small cord or wire. That the mind should be able to attend to these different equilibriums, is very wonderful; but that it does attend to them is evident, because not only the attention of the mind is requisite, but a particular direction of the eye. This direction cannot be given to the eye without a preceding act of the mind.—We have a similar illustration of the rapidity of the mind in directing itself to different objects in the performers at the circus. The performer vaults upon a horse, when at full speed; he rises on the saddle; he stands upon one foot, and, in this situation, while his horse is in the most rapid movement, performs a variety of feats, every one of which requires from the mind a multitude of distinct acts of attention.

§. 177. *Of rapidity of attention in connection with habits.*

In connection with what has been said, we are led to remark upon the views of Reid and Hartley on the subject of HABITS. Their views are, that habits operate without will or intention on the part of the person, who has formed them; and that, as they are without any attendant thought or mental operation, they are to be considered as merely mechanical or automatick principles. They illustrate their ideas, as well as imagine that they prove them, by the instance of a person, learning to play on the harpsichord. When a person first begins to learn, it is admitted by all, that there is an express act of volition, preceding every motion of the fingers. By degrees the motions appear to cling to each other; at least they follow each other with such ease and rapidity, that the volitions, which were at first easily recognized and distinguished, become evanescent and imperceptible;—in other words, there is nothing left but the motions; there is no act of the mind. But the concluding part of this statement, which is adopted by

the advocates of the opinion, that habits are altogether mechanical, does not carry with it very strong evidence. It may be admitted, that the volitions are evanescent and apparently imperceptible. But all this may happen on what we conceive the more rational supposition, that the volitions exist, but are so very rapid, and arrest in so very small a degree the attention, or rather arrest it for so short a time, as not to be remembered.

An evidence of the correctness of this supposition is, that the most rapid performer is able, when he pleases, to play so slowly, that he can distinctly observe and recollect every act of the will in the various movements of the fingers. And when he has checked his motions so as to be able to observe the separate acts of volition, he can afterwards so accelerate those motions and of course so diminish the power, or what is the same thing, the time of attention, that he cannot recall the accompanying volitions.

In favour of the latter statement, the performances of the equilibrist and of the actors of the circus may be again referred to. In their performances it is certain, that as great a rapidity of mental operation is requisite, as in performing on any musical instruments. The movements of the equilibrist, of the rope-dancer, and of the performer on horseback, do not succeed each other in a certain regular order, like the movements of a player on the harpsichord, in performing a piece of musick. It may be pronounced impossible for them to perform experiments, which agree in every particular with preceding experiments. They are governed in their volitions and movements by a variety of circumstances, which arise on every particular occasion, and which could not have been foreseen; and there is, consequently, a rapidity of volition in these instances not less than would be required in playing the harpsichord on the hypothesis, which we have thought preferable.—There remains to be mentioned one more instance, illustrative of the views, which have been given,—that of an expert accountant. We find, that such an accountant can sum up, almost with a single glance of the eye, a long column of figures. The operation is performed almost instantaneously,

and yet he ascertains the sum of the whole with unerring certainty. There cannot be a question, that every figure in the whole column has come under his notice, and that its proper worth has been allowed to it, but he is unable to recollect the particular figures. Here is an instance, where we have decisive proof of the existence of a rapidity in the mental operation of attention as great as we have contended for, and where there is no distinct remembrance of that operation afterwards ;—it is an instance well fitted to throw light upon and explain the true nature of all other cases of mental habits, viz. That they are associations of thought, which have acquired facility and quickness by repetition or practice.

§. 178. *Of attention in legerdemain and ventriloquism.*

It has with no little reason been thought, that the dexterity of jugglers in practising tricks of legerdemain or sleights of hand illustrates and confirms in some measure the views, which have been given. These persons acquire the power of performing certain feats with astonishing rapidity by habit. The rapidity, with which they perform their feats, is undoubtedly the great secret of the impositions, which they are able to practise on the understandings of those, who observe them. The time, which they take up in going through their tricks of legerdemain, is so very short, that the spectator is unable to exert that degree of attention, which is necessary to lay the foundation of memory ; so that the performance is the same to him, in consequence of his inability to remember any thing, as if he had never seen it.

It may not be out of place briefly to remark here in explanation of VENTRILLOQUISM, an art, by which persons can so modify their voice, as to make it appear to their audience to proceed from different distances and directions. The great requisite on the part of the ventriloquist is to be able to mimick sounds ; and he will be likely to succeed nearly in proportion to his skill in this particular. The secret then of his acoustick deceptions will be sufficiently

understood by referring to the statement in §. 29, viz. That, previous to experience, we are unable to refer sounds to any particular external cause.—The sound itself never gives us any direct and immediate indication of the place, or distance, or direction of the sonorous body. It is only by experience, it is only by the association of place with sound, that the latter becomes an indication of the former. Now, supposing the ventriloquist to possess a delicate ear, which is implied in his ability to mimick sounds, he soon learns by careful observation the difference, which change of place causes in the same sound. Having in this way ascertained the sounds, which, in consequence of the associations men have formed, are appropriate to any particular distance, direction, or object, it is evident, whenever he exactly or very nearly imitates such sounds, that they must appear to his audience to come from such distance, object, or direction.—One part of the art, however, consists in controlling the attention of the persons present, and in directing that attention to some particular place by a remark, motion, or in some other method. If, for instance, the sound is to come from under a tumbler or hat, the performer finds it important to have their attention directed to that particular object, which gives a fine opportunity for the exercise of all those associations, which they have formed with any sound coming from a very confined place. All, then, that remains for him to do, is, to give his voice a dull modulation and on a low key, which we know from our experience to be the character of confined sounds. Then there seems to be a voice speaking under a tumbler or hat; and if any person should, either intentionally or unintentionally, lift these articles up, the ventriloquist immediately utters himself on a higher key, like a person, who had been very much confined, on being readmitted into the free and open air.—In all these cases, both of legerdemain and of ventriloquism, a great deal depends on the skill of the performer, in directing the attention of those, who witness the exhibition, to some particular object, or in diverting their attention from it; but in sleights of hand there is the still more difficult art of

performing feats so rapidly as absolutely to prevent the degree of attention requisite for memory.

§. 179. *Whether the mind can attend to more than one object at the same time.*

In connection with what has already been said, we are in some degree prepared to consider the question, Whether the mind can attend to more than one thing at one and the same instant? The question can perhaps be stated more clearly thus;—Whether we can attend at one and the same instant to objects, which we can attend to separately? This question does not admit of a direct appeal to the fact, and, therefore, cannot be decided with perfect confidence; but the opinion, that we cannot attend to more than one object at a time has been thought by most of those, who have carefully examined the subject, to be far the most reasonable and philosophical.—It is true, there are many cases, where the mind *appears* to exert different acts of attention at once. But when we consider the astonishing rapidity of our thoughts, it is obvious, that these cases may be explained without supposing the mental acts in question to be co-existent. The instances of mental rapidity, which have been brought forward already, apply here, and are to be kept in recollection. It is a point well and satisfactorily ascertained by such facts as we have alluded to, that it is possible for the mind to exert different acts of attention in an interval of time so short, as to produce the same sensible effect or *appear* to be the same, as if they had been exerted at one and the same moment. This is proved in particular by what was said of equilibrists, performers at the circus, rope-dancers, and acts of legerdemain. As, therefore, we never can prove by any direct evidence, that the mind actually attends to different objects at one and the same time, but merely that it *appears* to, we justly draw the conclusion, that it does not thus attend to them, because that appearance can be accounted for by facts, which are well established. That is to say, it can be accounted for sufficiently well by what we have seen and known of the rapidity of the mind's op-

erations ; and this, therefore, is the preferable doctrine.—
The opinions, advanced in this section, may be further considered in respect to musick.

§. 180. *On attending at the same time to different parts in musick.*

It seems to be a common idea, that, in a concert of musick, a good ear can attend to the different parts at the same time, and feel the full effect of the harmony. That this may possibly be the case it seems not necessary to deny. But after what has been said of the rapidity, with which the mind transfers its attention from one object to another, it cannot be thought to be probable, and there is good ground for offering another explanation and one more philosophical. This explanation can be easily conjectured, viz. That the mind passes from one part of the musick to the other with such quickness, as to give us no perception of an interval of time. If the views taken in the preceding section be correct, as one can hardly doubt after looking at the arguments brought forward, this explanation in respect to musick necessarily follows.

§. 181. *Of attention in the perception of external objects.*

In discussing the subject of attention, Mr. Stewart, in connection with his views on that subject, introduces some remarks in respect to vision. He makes this supposition, That the eye is fixed in a particular position, and the picture of an object is painted on the retina. He then starts this inquiry,—Does the mind perceive the complete figure of the object at once, or is this perception the result of the various perceptions we have of the different points in the outline ? He holds the opinion, that the perception is the result of our perceptions of the different points in the outline, which he adopts as naturally consequent on such views, as the following. The outline of every body is made up of points or smallest visible portions ; no two of these points can be in precisely the same direction ; therefore, every point by itself constitutes just as distinct

an object of attention to the mind, as if it were separated by some interval of empty space from all the other points. It follows from these facts, that it is impossible for the mind to attend to more than one of these points at once, since they can be distinct objects of attention, and it has appeared that the mind cannot attend at one and the same time to objects, which it can attend to separately. The conclusion, therefore, is, as the perception of the figure of the object implies a knowledge of the relative situation of the different points with respect to each other, that such perception is the result of a number of different acts of attention. How then do we appear to see the object at once? The answer is, that the acts of attention are performed with such rapidity, that the effect with respect to us is the same, as if the perception were instantaneous.—There are some facts, which go to confirm these views of the mode of our perception of objects. We find, that we do not have as distinct an idea, at the first glance, of a figure of a thousand sides, as we do of a triangle or square. But we evidently should, if the perception of visible figure were the immediate consequence of the picture on the retina, and not the combined result of the separate perceptions of the points in the outline. Whenever the figure is very simple, the process of the mind is so very rapid, that the perception seems to be instantaneous. But when the sides are multiplied beyond a certain number, the interval of time necessary for these different acts of attention becomes perceptible. It follows from these views of the mode of perceiving visible figure, that there can be no perceptions of the visible form of objects without the faculty of memory.

§. 182. *Rapidity of attention one cause of difficulty in criticism.*

Experience teaches us, that certain objects are fitted to give pleasure, while others are either indifferent, or impart disgust. We know the fact but it is impossible for us to give any explanation of it, further than to say, that such is

our constitution or that we are thus formed. (See §. 19.) But then previously to the emotion of pleasure or displeasure, of satisfaction or of disgust, the mind is very active, and has not only a multitude of perceptions, but forms various comparisons. We will suppose, that the emotion excited is that of pleasure, and that the object which is the cause of it exhibits different qualities; some of them are pleasing, some are indifferent, and others are suited to cause disgust. All these different qualities are in a state of combination, and they mutually affect each other. Here the mind rapidly makes a discrimination: it fixes upon the particular parts of the object, which is supposed to possess many different qualities, and separates the elements of beauty; it assigns their due influence to those qualities, which are either indifferent or are displeasing; it takes a comparative view of the whole; and the result of these various perceptions and comparisons is that new state of the mind, which we call a pleasing emotion. But we no sooner have the pleasing emotion, than we feel a sort of disinclination to retrace the previous steps. And when it is otherwise and we have an inclination to, the mental process has been so rapid, that we often meet with serious difficulty in detecting the separate steps of it in the order of their succession. So that we have here one cause of difficulty in criticism, for it comes within the province of the philosophy of criticism, to detect and point out those operations of the mind, which precede emotions either of pleasure or disgust. And in doing this, critics meet with the obstacle, which has been mentioned. We see here a cause also, why they are so often at variance with each other as to the precise ground of emotions of pleasure and the opposite; and also why others, who do not presume to take upon themselves the rank of critics, do not always assent to their expositions, and sometimes differ from them.—One of the great requisites in a critic is the ability to reflect steadily and carefully on the operations of the mind, in order that he may check them in the rapidity of their progress and detain them sufficiently long to be able to analyze them.

§. 183. *Of attention as connected with the improvement of the other senses when one is lost.*

Another well-known and interesting fact illustrates the views taken in this chapter. When one of our senses is accidentally lost, there is an improvement of the others; when a person loses his sight, there is an increased sensibility of the touch. The cause of this has been already stated and remarked upon. (See §. 41.) We do not suppose, that there is any change in the physical constitution of the body, which causes the improvement in the remaining senses. Such a supposition is unnecessary, and, as the fact can be explained without it, is unphilosophical. Another explanation, is, therefore, to be preferred.—When all the senses remain and are in full exercise, there are a multitude of slight suggestions from them, which are perceived but are not attended to, because they are not of any urgent and immediate practical value; and they are not remembered, because they are not attended to. We mean, they receive but very slight attention. But when one or more of the senses is gone, those slight suggestions at once assume an increased importance. They become necessary to one's enjoyment and perhaps existence. The mind, therefore, is under a sort of necessity of delaying upon and marking a variety of evanescent intimations from the senses, which it formerly neglected. It not only merely attends to them, but examines them, and puts them to hardly less practical use than many more obvious sensations. So that there is not necessarily any physical improvement of the senses, when one is lost; but the mind merely attends to and remembers their slight suggestions, more than it previously did!

§. 184. *Of attention in connection with the intellectual habits of men in active life.*

The mental operations of men in active life are often very rapid, the conclusions, at which they arrive on subjects somewhat complicated, are generally correct, but

they frequently find themselves unable to state clearly the process of reasoning, by which they arrived at the conclusion. Oliver Cromwell, the English Protector, is said to have been a person, to whom this statement would well apply. Rarely any man has had a clearer insight into events, but when he attempted to explain himself, he was confused and obscure. If we were to give his intellectual character in a single sentence, it would be but just to say, that Cromwell was a man of argument, but no speaker. His mind readily insinuated itself into the intricacies of a subject, and while he could assert with confidence, that he had arrived at a satisfactory conclusion, he could not so readily describe either the direction he had taken or the involutions of the journey. This character of the Protector will apply to multitudes of men in active life, although undoubtedly for the most part in a less degree. Their distinguishing traits are two,—an ability to examine with great quickness all the parts of an intricate subject, and an equal want of ability in stating this process to others.

Concerning the first of these characteristics, it is sufficient to say, that the great readiness, which they exhibit, is a habit, which they have been compelled to form by the circumstances, in which they have been placed. In a thousand emergencies they have been obliged to act with quickness, and at the same time with caution; in other words, to examine subjects, and to have it done with expedition. In this way the habit spoken of has been formed, viz. of exceeding readiness in all their mental acts.—The other prominent mental trait in men in active life arises from this great quickness of intellectual operation, which they are capable of putting forth. The facts, which have but just been before us, illustrate this case. The minute circumstances, which are examined, previous to a judgment on all subjects of difficulty, are passed in review with such rapidity, are made in so very small a degree or rather for so short a time the objects of separate attention, that they vanish and are forgotten. Hence these persons, although the conclusion to which they have come be satisfactory, as they are unable to remember them, are, consequently, unable to state to

others all the subordinate steps in the argument. Every thing has once been fairly before their own minds, but their argument, as stated in words, owing to their inability to arrest and embody all the evanescent processes of thought, appears to others defective and confused.—And in truth it is a known fact, that mere men of business have for the most part a great repugnance to stating their views in publick. They regard it as a task of much difficulty, as undoubtedly it is to persons of such intellectual habits. When obliged to do it, their only resort is to prepare themselves in private, to examine again and again their thoughts, to throw them into words and sentences, and to fix the verbal propositions with as much exactness as possible in the memory ;—otherwise they fail to do justice either to themselves or their subject.

§. 185. *Of exercising attention in reading.*

If attention, as we have seen, be the foundation of memory, then we are furnished with a practical rule of considerable importance. The rule is, Not to give a hasty and careless reading of authors, but to read them with a degree of deliberation and thought.—It is the fault of some persons, that they are too quickly weary, that they skip from one author to another, and from one sort of knowledge to another. It is true, there are many things to be known ; we would not have a person limit himself entirely to one science, but it is highly important, that he should guard against that rapid and careless transition from subject to subject, which has been mentioned. And why is it important ? The intimation at the head of this section, that there cannot be memory without attention, or rather that the degree of memory will vary with the degree of attention, suggests the answer. By yielding to the desire of becoming acquainted with a greater variety of departments of knowledge, than the understanding is able to master, and, as a necessary consequence, by bestowing upon each of them only a very slight attention, we remain essentially ignorant of the whole.

The person, who pursues such a course, finds himself unable to recall what he has been over; he has a great many half-formed notions floating in his mind, but these are so ill shaped and so little under his control as to be but little better, than sheer ignorance. This is one evil result of reading authors and of going over sciences in the careless way, which has been specified, that the knowledge thus acquired, if it can be called knowledge, is of very little practical benefit, in consequence of being so poorly digested and so little under control.—But there is another and perhaps more serious evil;—this practice greatly disqualifies one for all intellectual pursuits; the mind, having been so long left at liberty to wander from object to object without being called to account and subjected to the rules of salutary discipline, entirely loses at last the ability to dwell upon the subjects of its thoughts and to examine them. And when this power is once lost, there is but little ground to expect any solid attainments.

NOTE. Many writers on the mind and on education in general from Quintilian down to Mr. Locke have noticed and remarked upon the connection existing between attention and memory. More recently Condillac has briefly examined the subject of attention, and has happily illustrated the astonishing rapidity, with which the mind is capable of giving its attention to successive objects. Helvetius, another French writer, has given, in his work on the mind entitled *DE L'ESPRIT*, a chapter where he treats of the unequal capacity of attention in different individuals. The chapter to which we refer is entitled, *de l'inégale capacité d'attention*. He investigates in particular the ability of patient inquiry or power of continued attention, which is so very necessary in philosophical pursuits. Dugald Stewart, pursuing the path which Condillac had partially opened, has treated this subject with great ability; he especially considers rapidity of attention or those exceedingly minute acts of attention, without which there can be no recollection or memory whatever.—*Locke's Essay*, B. II. chap. 10.—*Condillac's Origin of Knowledge*, P. 1. Sect. 2. chap. 1.—*Stewart's Elements*, chap. 2.

CHAPTER SIXTEENTH.

OF CONCEPTIONS.

§. 186. *Meaning of conceptions and how they differ from certain other ideas.*

CONCEPTIONS is the name given to those ideas, which we have of any absent object of perception, or of any sensations which the mind has formerly felt. Whenever we have conceptions, our ideas are replaced, as Shakespeare expresses it, in the "mind's eye," without our at all considering at what time or in what place they first originated. In other words, our ideas or mental states are *recalled*, and nothing more.—Using, therefore, the term CONCEPTIONS to express a class of ideas, it may be sufficient, in order to give some notion of their distinctive character, to mention, how they differ from perceptions, and from ideas of memory.—(1) They differ from perceptions, because the objects of them are absent. When we perceive any thing, an edifice, a lake, or a mountain; the objects of our perceptions are before us. But we may form conceptions of them, and they may exist in "the *mind's* eye," however distant.—(2) They differ also from ideas of memory, because they are contemplated exclusively of any considerations of time. But in every act of the memory there is an idea of the past. Hence, as those states of mind, to which we give the name of conceptions, possess these distinctive marks or characteristics, they are entitled to a separate name.

CONCEPTIONS being merely mental states or acts of a particular kind are regulated by the general laws of the intellect, and make their appearance and disappearance on the principles of association. Those principles have already been explained. Whenever at any time we may use the phrase "power of conception" or "faculty of conception," nothing more is to be understood by such expressions than this, that there is in the mind a susceptibility of ideas

possessing the marks, which we have ascribed to this class.

§. 187. *Of conceptions of objects of sight.*

One of the striking facts in regard to our conceptions is, that we can far more easily conceive the objects of some senses than of others. Suppose a person to have travelled abroad, and to have seen St. Peter's church and the Vatican, or to have visited the cataract of Niagara and the falls of St. Anthony, or any other interesting object of sight; it is well known, that the mind of this person afterwards even for many years very readily forms a conception of those objects. Such ideas are so easily and so distinctly recalled, that it is hardly too much to say of them, that they seem to exist as permanent pictures in the mind. It is quite different with a particular sound, which we have formerly heard, and with a particular taste, or any pleasant or painful sensations of the touch, which we have formerly experienced. When the original perceptions have in these last cases departed, we find that the ideas do not readily exist again in the absence of their appropriate objects, and never with the distinctness, which they possessed at first. Ideas of visible objects, therefore, are more readily recalled, or we can more easily form conceptions of such objects than we can of the objects of the other senses.—This peculiarity in the case of visible objects may be thus partially explained.

Visible objects or rather the outlines of them are complex; that is, they are made up of a great number of points or very small portions. (See §. 181.) Hence the conception, which we form of such an object as a whole, is aided by the principles of association. The reason is obvious. As every original perception of a visible object is a compound, made up of many parts, whenever we subsequently have a conception of it, the process is the same; we have a conception of a part of the object, and the principles of association help us in conceiving the other parts. Association connects the parts together; it presents them to the mind

in their proper arrangement, and helps to sustain them there.

We are not equally aided by the laws of association in forming our conceptions of the objects of the other senses. When we think of some sound, or taste, or touch, the object of our conception is a single detached sensation. In every such sound, or taste, or sensation of touch, whether we consider it at its first origin or when it is subsequently recalled, there is not that association of the parts, which we suppose to exist in every visual perception, and which must, of course, exist in every conception of objects of sight, which subsequently takes place. Accordingly our conceptions of the latter objects arise more readily, and are more distinct than of the others.

§. 188. *Of the influence of habit on our conceptions.*

It is another circumstance worthy of notice in regard to conceptions, that the power of forming them depends in some measure on habit. In what sense we are to understand the terms power and faculty, when used in this connection, has already been explained.—A few instances will help to illustrate this statement; and the first to be given will be of conceptions of sounds. Our conceptions of sounds are in general very indistinct, as appeared in the last section. But a person may acquire the power of amusing himself with reading written musick. Having frequently associated the sounds with the notes, he has at last such a strong conception of the sounds, that he experiences, by merely reading the notes, a very sensible pleasure. It is for the same reason, viz. because our associations are strengthened by habit, that readers may enjoy the harmony of poetical numbers without at all articulating the words.

That our power of forming conceptions is strengthened by habit is capable of being illustrated also from the sight. A person, who has been accustomed to drawing, retains a much more perfect notion of a building, landscape, or other visible object, than one who is not. A portrait painter,

or any person, who has been in the habit of drawing such sketches, can trace the outlines of the human form with very great ease ; it requires hardly more effort from them than to write their name.—This point may be illustrated by the difference which we sometimes notice in people in their conceptions of colours. Some are fully sensible of the difference between two colours when they are presented to them, but cannot with confidence give names to these colours when they see them apart, and may even confound the one with the other. Their original sensations or perceptions are supposed to be equally distinct with those of other persons ; but their subsequent conception of the colours is far from being so. This defect arises partly at least from want of practice or habit. The persons, who exhibit this weakness of conception, have not been compelled by their situation nor by mere inclination to distinguish and to name colours so much as is common.

§. 189. *Of the subserviency of our conceptions to description.*

It is highly favourable to the talent for lively description, when a person's conceptions are readily suggested and are distinct. Even such an one's common conversation differs from that of those, whose conceptions arise more slowly and are more faint.—One man, whether in conversation or in written description, seems to place the object, which he would give us an idea of, directly before us ; it is represented distinctly and to the life. Another, although not wanting in a command of language, is confused and embarrassed amid a multitude of particulars, which in consequence of the feebleness of his conceptions he finds himself but half acquainted with ; and he, therefore, gives us but a very imperfect notion of the thing, which he would describe.

It has been by some supposed, that a person might give a happier description of an object, of an edifice, of a landscape, or other object, from the conception than from the actual perception of it. The perfection of a descrip-

tion does not always consist in a minute specification of circumstances; in general the description is better, when there is a judicious selection of them. The best rule for making the selection is, to attend to the particulars, that make the deepest impression on our own minds, or, what is the same thing, that most readily and distinctly take a place in our conceptions.—When the object is actually before us, it is extremely difficult to compare the impressions which different circumstances produce. When we afterwards conceive the object, we possess merely the outline of it; but it is an outline made up of the most striking circumstances. Those circumstances, it is true, will not impress all persons alike, but will somewhat vary with the degree of their taste. But when with a correct taste any one combines lively conceptions, and gives a description from those conceptions, he can hardly fail to succeed in it.

§. 190. *Of conceptions attended with a momentary belief.*

Our conceptions are sometimes attended with belief; when they are very lively, we are apt to ascribe to their objects a real existence or believe in them. It is not asserted by us, that the belief is permanent; but a number of facts strongly lead to the conclusion, that it has a momentary existence.—(1) A painter in drawing the features and bodily form of an absent friend, may have so strong a conception, so vivid a mental picture, as to believe for a moment that his friend is before him. After carefully recalling his thoughts at such times and reflecting upon them, almost every painter is ready to say, that he has experienced some illusions of this kind. It is true, the illusion is very short, because the intensity of conception, which is the foundation of it, can never be kept up long when the mind is in a sound state. Such intense conceptions are unnatural. And, further, all the surrounding objects of perception, which no one can altogether disregard for any length of time, every now and then check the illusion and terminate it.—(2) Place a person on the battlements of a high tower; his reason tells him he is in no danger; he knows he

is in none. But after all he is unable to look down from the battlements without fear; his conceptions are so exceedingly vivid as to induce a momentary belief of danger in opposition to all his reasonings.—(3) There are persons who are entirely convinced of the folly of the popular belief of ghosts and other nightly apparitions, but who cannot be persuaded to sleep in a room alone, nor go alone into a room in the dark. Whenever they happen out at night, they are constantly looking on every side; their quickened conceptions behold images which never had any existence but in their own minds, and they are continually in terror. In such cases we see the influence of the prejudices of the nursery. They were taught in early childhood to form conceptions of ghosts and other apparitions, and the habit still continues. It is true, when they listen to their reasonings and philosophy, they may well say that they do not believe in such things. But the effect of their philosophy is merely to check their belief; not in one case in a thousand is the belief entirely overcome. Every little while, in all solitary places, and especially in the dark, it returns, and when banished returns again; otherwise we cannot give any explanation of the conduct of these persons.

§. 191. *Conceptions which are joined with perceptions.*

The belief in our mere conceptions is the more evident and striking, whenever they are at any time joined with our perceptions. A person walking in a field in a thick foggy morning perceives something, no matter what it is; but he believes it to be a man, and does not doubt it. In other words, he truly perceives some object, and, in addition to that perception, has a mental conception of a man attended with belief. When he has advanced a few feet further, all at once he perceives, that what he conceived to be a man is merely a stump with a few large stones piled on its top. He perceived at first, as plainly or but little short of it, that it was a stump, as in a moment afterwards; there was the whole time very nearly the same

visible form and the same dimensions in his eye. But whatever he had in his eye, he certainly had in his mind the conception of a man, which overruled and annulled the natural effects of the visual perception; the conception being associated with a present visible object acquired peculiar strength and permanency so much so that he truly and firmly believed, that a human being was before him. But the conception has departed; the present object of perception has taken its place, and it is now impossible for him to conjure up the phantom, the reality of which he but just now had no doubt of.—Many a person has waked up in the night and has firmly believed, that he saw a form clothed in white standing in an erect position at some part of the room, but in a moment after the imaginary visitant has vanished, and there is nothing left but the reflection of the moonbeams on the wall.—In cases of this kind, where the conceptions are upheld, as it were, by present objects of perception, and receive a sort of permanency from them, nothing is better known, than that we often exercise a strong and unhesitating belief. These instances, therefore, can properly be considered as illustrating and confirming the views in the preceding section.

§. 192. *Of our conceptions at tragical representations.*

These observations suggest an explanation at least in part of the effects, which are produced on the mind by exhibitions of fictitious distress. In the representation of tragedies, it must be admitted, that there is a general conviction of the whole being but a fiction. But, although persons enter the theatre with this general conviction, it does not always remain with them the whole time. At certain passages in the poet peculiarly interesting, and at certain exhibitions of powerful and well timed effort in the actor, this general impression, that all is a fiction, fails. The feelings of the spectator may be said to rush into the scenes; he mingles in the events; carried away and lost he for a moment believes all to be real, and the tears gush

at the catastrophe which he witnesses.—The explanation, therefore, of the emotions felt at the exhibition of a tragedy, such as indignation, pity, and abhorrence, is, that at certain parts of the exhibition we have a momentary belief in the reality of the events which are represented. And after the illustrations which have been given, such a belief cannot be considered impossible.—The same explanation will apply to the emotions, which follow our reading of tragedies when alone, or any other natural and affecting descriptions. In the world of conceptions, which the genius of the writer conjures up, we are transported out of the world of real existence, and for a while fully believe in the reality of what is only an incantation.

§. 193. *Of conceptions in connection with apparitions.*

The subject of apparitions was considered at chapter ninth. APPARITIONS were defined at §. 93 in that chapter to be appearances, which seem to be real, but which exist only in imagination; that is, have only an imaginary existence. And at §. 95, in the same chapter, it was replied in answer to the inquiry,—How merely imaginary appearances can have so much the aspect of reality?—that they are ideas or conceptions, in no ways differing from ordinary conceptions but this, that they are more vivid. It was further remarked, that the conceptions, in consequence of being so much more vivid than common, are mistaken for the thing conceived of,—a state of the mind, which is brought about on the principles of association, for the real object, which was originally the cause of that state of mind. The conception of the man, of the mountain, the temple, or the procession, is so intense, so extremely vivid, that we as firmly believe them to be really in our view, as when at some former period we truly beheld them. This was the statement given at chapter ninth.

The statements made in the three last sections go a great ways in illustrating and confirming the views taken in the chapter on Apparitions. If the doctrines in the three preceding sections be admitted, it follows, that every

person may have conceptions so very vivid as for a short time to arrest his belief. And no doubt every person does experience something of this kind, more or less in the course of his life.

APPARITIONS, however, differ from conceptions where there is only a momentary belief; otherwise they would not have been treated of as a separate subject. Vivid conceptions, attended with only a momentary belief, and which are continually checked and set right by surrounding objects, do not unfit us for the common duties of life. Apparitions do unfit one for such duties; they are always owing, as appeared at §. 94, and other sections in the same chapter, to a disordered state of the mind either permanent or temporary.—They differ, therefore, from ordinary conceptions so vivid as to be attended with belief, in two respects. (1) They are greater in degree or the mental deceptions continue for a greater length of time. (2) They always imply a state of mind in some way disordered.—The causes of disordered states of mind is a subject of great difficulty, but as far as any light can be thrown upon it, it is examined at the chapter above referred to, and in a remaining one on persons, who are insane. But it is of some consequence to remark, that cases of apparitions may be distinguished from cases of insanity. When a person professes to see objects, which his associates and by-standers know are not present, it is too apt to be concluded, that he is deranged or insane in the usual sense of those terms. The mind is undoubtedly disordered; but if any one insists on calling it insanity, it must be admitted to be of a less permanent and less dangerous kind, than commonly goes under that name. As an evidence, we refer to the case of Nicolai already given.

CHAPTER SEVENTEENTH.

OF ABSTRACT IDEAS.

§. 194. *Definition of abstract ideas and kinds of them.*

There is a division of our thoughts, to which the name of abstractions or abstract ideas is given, because by certain acts of the mind they are abstracted or separated, and are made subjects of consideration apart from other ideas, with which they are ordinarily found to be associated.—They may be divided into two classes, viz. particular abstract ideas, and general abstract ideas.—Of the first class the different kinds of colours may be mentioned as an instance. When any absent object of perception occurs to us, our thoughts will sometimes fix upon the colour and make that the subject of consideration, without particularly noticing other qualities of the object, such as weight, hardness, taste, form, &c. We may distinguish in any body its solidity from its extension, or we may direct our attention to its weight, or its length, or breadth, or thickness, and make any one of these a distinct object in our thoughts, even when it is impossible to separate them in the subject to which they belong. When any quality or attribute of an object, which does not exist by itself but always in a state of combination, is detached by our minds from its customary associates and is considered separately, it becomes a particular abstract idea.—By general abstract ideas we mean those states of mind, which stand for classes or the various genera and species of objects, such as are expressed by the general names, man, bird, sheep, fish, animal, &c. Thus we may consider those qualities in an object which will lead us to class it as an animal, without taking into view those which belong to it as a man or a bird; or in looking at the various classes of animals we may consider them as men or as birds, and neglect and pass by those qualities, which in consequence of being

found in other animals cause them to be classed as different species.—These two classes seem to embrace all our abstract ideas whatever, but they are themselves so different from each other and also the intellectual processes by means of which they exist, that they require some separate consideration.

§. 195. *Of the formation of particular abstract ideas.*

The manner of expressing ourselves on the subject of our abstract notions, to which we have been accustomed, is apt to create and cherish in us a belief in the existence of a separate mental faculty, adapted solely to this particular purpose. We know not that there is any the least ground for such belief in the case of particular abstract ideas to which we shall first attend ; nor has the opinion, to which we allude, been altogether well founded in respect to the other class ; although, as will be seen, the intellectual process in the two cases is not precisely the same.—The following statement will be sufficient to show, how those of the first class are formed.—Our ideas in the first place are received from the senses, and from the observation of what takes place within us or reflection ; and however much they may have been decomposed at first, a large class of them are soon found to exist with a considerable degree of permanency in a state of combination or are complex. It has sufficiently appeared, that these ideas are recalled to the mind in the absence of their appropriate objects by the principles of association, and also that the separate parts of all our complex notions are held together in their state of combination by the same principles. In every process of abstraction, which results in merely considering any single quality or attribute of an object separate from the rest, we have a desire to consider some part of the complex idea more particularly than the others. If any one object to the term *desire*, it is certain, that our attention is from some cause, whatever it may be, more particularly directed to such part ; and attention itself seems to be nothing more than a particular direction

of the mind, accompanied with desire. When the mind is in this high degree directed to any particular part of a complex idea, we find it to be the fact, that the principle of association, which keeps the other parts in their state of union with it, ceases in a corresponding degree to operate; they rapidly fall off and disappear, and the particular quality or attribute, towards which the mind was especially directed, remains the sole subject of consideration. That is to say, it is abstracted or becomes an abstract idea.

This in the formation of particular abstract ideas seems to be the process of the mind, and nothing more; viz. Some feeling of desire or choice in respect to a part of the complex idea, accompanied with the exercise of association, (1) in suggesting to the mind the complex idea, and (2) in ceasing to retain the parts of it, towards which attention is not directed. Such is the activity of the mind, and in so many ways it views the "images of things," that this striking process of detaching, and examining, and replacing, and changing the parts of our complex notions, is almost constantly going on. And after the mind has thus shifted its position, and has been now in this state and now in that, as if playfully to show its wonderful readiness in diminishing itself to a part of its previous complexity, it seems as readily to swell back again, if we may be allowed in such figurative expressions, to its former dimensions, and exists the same as before the process of abstraction commenced.

§. 196. *Of generalizations of particular abstract ideas.*

When we speak of the generalizing of this class of abstract ideas, it seems to be chiefly meant, that in our experience of things we observe them to be common to many subjects. We find whiteness to be a quality of snow, of chalk, of milk, and of other bodies; and whenever with the simple abstract notion of whiteness we connect in our thoughts the additional circumstance of its not being limited to one body but the property of many, the term

may be said to be generalized. And this seems to be all, that can be properly understood by generalization when applied to the states of mind which we are now considering.

§. 197. *Of particular abstractions in poetry, painting, &c.*

The process of abstraction, which is gone through in the formation of particular abstract ideas, is greatly subservient to the exertions of a creative imagination, as they appear in painting, poetry, and the other fine arts.—The poet and the painter are supplied with their materials from experience: without having received ideas from some source, they never could have practised their art. But if they do not restrict themselves to mere imitation, they must combine and modify the ideas which they have, so as to be able to form new creations of their own. But every exertion of this kind which they make of their powers, presupposes the exercise of abstraction in decomposing and separating actual conceptions and in forming them anew. See in connection with this section the chapter on IMAGINATION.

§. 198. *Of general abstract ideas.*

We are now to remark upon the second class.—General abstract ideas are our notions of the classes, or genera and species of objects.—As they include classes, it is hardly necessary to observe, that we cannot possess them without first considering two or more objects together. We may form, on the contrary, those of the first class or particular abstract ideas by considering individual objects merely.

Whenever, therefore, we see a number of trees of the same kind, or a number of flowers, or of men, or of horses, or sheep, the mind immediately exists in that state, which, when we think fit to give it a name, we call a general abstract idea.

This general idea, however, does not embrace every particular, which makes a part of the individuals before us; it leaves out of consideration certain peculiarities which

belong to each tree, each flower, man, &c. when separately considered. And this is the reason of ideas of this kind being called abstract; because, although they embrace the whole number of individuals in certain respects, they detach and leave out altogether a variety of particulars in which they disagree.—As soon, therefore, as we perceive a number of objects before us of the same kind, we at once virtually dismiss from our view these circumstances of disagreement, and the mind exists, as above remarked, in a new state, which is essentially a feeling of resemblance. So that those mental states, which when put into words may be called feelings or immediate mental discoveries of the relation of resemblance in a number of objects, constitute what we understand by general abstract ideas, and these, as far as the mind is concerned and leaving out the names, are the true ideas of genera and species.—But as a question may arise in the minds of some in regard to this feeling of resemblance, it is proper, in order to meet any such inquiries briefly to remark further.

§. 199. *Of relative suggestions or perceptions of relations.*

Nothing is more evident than that the objects, which we perceive, are in some way compared, one with another; and that we learn, when such comparisons take place, how they conform to each other or how they differ. We compare objects together in respect to their position, their resemblance, degrees, and in a great variety of respects, as was particularly seen at chapter eighth in the remarks there made on IDEAS OF RELATION. This is conformable to the general experience of men.—The result of thus considering objects together is certain new states of the mind, which may be called ideas of relation or feelings of relation, and which are essentially different from our simple perceptions or conceptions of the objects that sustain the relation.—But the inquiry arises, By virtue of what principle is this discovery of relations made? The answer is, that there is in the mind an original tendency or susceptibility, by means of which, whenever we perceive different

objects together, we are instantly, without the intervention of any other mental process, sensible of their relation in certain respects.

We may here give an illustration of the exercise of this original susceptibility similar to those already given. When a number of objects are together, belonging to the same species, as two or more sheep, or horses, or men, or trees, or flowers, the mind immediately exists in that state, which constitutes the feeling of *resemblance*.—Here beside the mere perception of the objects we experience a feeling of relation, since that resemblance in the objects before us of which we are conscious is one of the many kinds of relation, of the perception of which the mind has been asserted to be originally susceptible. It is by means of this original susceptibility of relations, as it exhibits itself in particular in the perception of the relation of resemblance, that all of that class which we term *general abstract ideas* are formed. None we imagine can be formed without it.

All this we know is to be decided, not by the opinions and assertions of an individual, but by the general experience. In any doctrines, which are laid down in regard to the mind, every person has a right to give his testimony; and whenever that testimony is a correct representation of the intellectual processes, it is valuable, whatever may be its tendency. But it is confidently thought, that nothing more is wanted, than an appeal to what men generally find themselves conscious of, to confirm the above views. —For a particular defence of the doctrine, that we have an original *susceptibility of perceiving or feeling the relations of objects*, the reader is referred to what is said on the subject in Brown's *Philosophy of the Mind*, who has entered into the investigation of it at greater length, than can be permitted here.

§. 200. *Of the classifications of objects.*

In the classification of objects and in giving general names, the process after what has been said cannot be thought to be either long or difficult.—The first step is

the perception of two or more objects, which constitutes one state of mind. The second is the feeling of resemblance, which is the general idea. Guided by the feeling of resemblance, we are enabled to say, what objects come within the limits of a particular class, and what do not. The name, which is given to the general idea, is what in treatises of Logick is called the general name or genera and species. See in connection with this §. 117—119.

§. 201. *Of general abstract ideas in connection with numbers, &c.*

The ability which the mind possesses of forming general abstract ideas is of much practical importance; but whether it be the characteristic attribute of a rational nature or not, as some have supposed, it is not necessary now to inquire. Its subserviency in the forming of classifications has already been seen.—And it is further to be remarked, that without that mental susceptibility, by which we form general notions, we should not be able to *number*, even in the smallest degree. Before we can consider objects as forming a multitude, or are able to number them, it seems necessary to be able to apply to them a common name. This we cannot do, until we have reduced them to a genus; and the formation of a genus implies a mental susceptibility of feeling the relation of resemblance. Consequently, we should be unable without such mental susceptibility to number.—How great then is the practical importance of that intellectual property, by which general abstractions are formed!—Without the ability to number, we should be at a loss in all investigations where this ability is required; without the power to classify, all our speculations must be limited to particulars, and we should be capable of no general reasoning.

§. 202. *Of the speculations of philosophers and others.*

There is a characteristic difference between the speculations of philosophers and those of the common mass of

people, worthy of some notice. The difference between the two is not so much, that philosophers are accustomed to carry on processes of reasoning to a greater extent, as this; that they are more in the habit of employing general abstract ideas and general terms, and that, consequently, the conclusions which they form are more comprehensive. Nor are their general reasonings, although the conclusions at which they arrive seem in their particular applications to indicate wonderful fertility of invention, so difficult in the performance, as is apt to be supposed. They have so often and so long looked at general ideas and general propositions, have been so accustomed, as one may say, to contemplate the general nature of things, divested of all superfluous and all specifick circumstances, that they have formed a *habit*; and the operation is performed without difficulty. It requires in such persons no greater intellectual effort, than would be necessary in skilfully managing the details of ordinary business.

The speculations of the great bulk of mankind differ from those of philosophers in being, both in the subjects of them and in their results, particular. They discover an inability to enlarge their view to universal propositions, which embrace a great number of individuals. They may possess the power of mere argument, of comparing propositions together which concern particulars, and deducing inferences from them to a great degree; but when they attempt to contemplate general propositions, their minds are perplexed, and the conclusions which are drawn from them appear obscure; however clearly the previous process of reasoning may have been expressed.

§. 203. *Of different opinions formerly prevailing.*

The subject of general abstract ideas, of which we have given a summary view, excited very considerable interest during the scholastick ages; and different opinions have prevailed concerning them, not only at that period, but more or less down to the present time. The disputes so widely prevailed, and so much interest was taken, that

it seems to be necessary to give a short sketch of them.

In this discussion there have been three parties, viz. the Realists, the Nominalists, and the Conceptualists.

§. 204. *Of the opinions of the Realists.*

Those, who go under this name, held, that general abstract ideas have a real and permanent existence, independent of the mind. Of a man, of a rose, of a circle, and of every species of things, they maintained, that there is one original form or archetype, which existed from eternity, before any individuals of the species were created. This original model or archetype is the pattern, according to which the individuals of all species are in the most important respects formed. The archetype, which is understood to embrace only the outlines or generic features of things, becomes an object of perception to the human intellect, whenever by due abstraction we discern it to be one in all the individuals of the species.—Such was the doctrine of the Realists, which in its most essential respects was very widely received from the time of Plato and Aristotle down to the commencement of the 12th century. But since that period, excepting a few ineffectual attempts which have been made from time to time to revive it, it has fallen into as general disrepute, on the ground of its being too hypothetical and not sufficiently sustained by facts.

§. 205. *Of the opinions of the Nominalists.*

About the commencement of the 12th century, Roscelinus, the instructor of Abelard, whose name occupies so conspicuous a place in the history of scholastick learning, proposed a new hypothesis. He maintained, not only that there are no original forms or archetypes, such as had been asserted to exist by the Realists, but that there are no universal abstract ideas of any kind. On the contrary, it seems to have been his opinion, as well as the sentiment of those who have subsequently approved of this doctrine, that nothing can be called general or universal but names, and that even to them universality can be ascribed only vix-

tually, and not in the strict and literal sense of the term.— That is, the names are in the first instance given to individuals, but when any individuals are specified, the nature of the mind is such, that we naturally and immediately think of other individuals of the same kind. So that the names are in fact particular, although owing to the principle which we now term association, the practical effect is the same as if it were otherwise, and hence the epithets “general” and “universal” are applied to them. This opinion in respect to general ideas and names, or some doctrine essentially of this description has found many advocates from Roscelinus and the enthusiastick Abelard down to Dugald Stewart.

§. 206. *Of the opinions of the Conceptualists.*

Those, who hold to the actual existence of general abstract ideas, which are not permanent archetypes independent of the mind, but only states of the mind, have generally been called Conceptualists. We have already given what we suppose to be the true mental process in the formation of such ideas. Whether we can have such ideas is best decided by each one’s personal experience ; and it can hardly be doubted, notwithstanding the refined arguments of Mr. Stewart and others, in what way such a question will be generally answered.

As far as the Realists are concerned the mere statement of their doctrine is sufficient at the present day to ensure its immediate rejection. The question lies then between the Nominalists, and those who have commonly been called Conceptualists ; and if there be insuperable objections to the doctrine of the former, that of the latter enhances its claims on our adoption.

Some of the objections to the sentiments of Roscelinus and those who have thought with him are forcibly summed up in the following passage from Brown’s *Philosophy of the Mind*.

“Of that rigid Nominalism, which involves truly no mixture of Conceptualism or of the belief of those feelings of

relation for which I have contended, but denies altogether the existence of that peculiar class of feelings, or states of mind which have been denominated general notions, or general ideas, asserting the existence only of individual objects perceived, and of general terms that comprehend these, without any peculiar mental state denoted by the general term, distinct from those separate sensations or perceptions which the particular objects, comprehended under the term, might individually excite,—it seems to me that the very statement of the opinion itself is almost a sufficient confutation, since the very invention of the general term, and the extension of it to certain objects only, not to all objects, implies some reason for this limitation,—some feeling of general agreement of the objects included in the class, to distinguish them from the objects not included in it, which is itself that very general notion professedly denied. As long as some general notion of circumstances of resemblance is admitted, I see very clearly how a general term may be most accurately limited ; but if this general notion be denied, I confess that I cannot discover any principle of limitation whatever. Why have certain objects been classed together, and not certain other objects, when all have been alike perceived by us ; and all, therefore, if there be nothing more than mere perception in the process, are capable of receiving any denomination which we may please to bestow on them ? Is it arbitrarily, and without any reason whatever, that we do not class a rose-bush with birds, or an elephant with fish ? and if there be any reason for these exclusions, why will not the Nominalist tell us what that reason is—in what feeling it is found—and how it can be made accordant with his system ? Must it not be that the rose-bush and a sparrow, though equally perceived by us, do not excite that general notion of resemblance which the term *bird* is invented to express—do not seem to us to have those relations of a common nature, in certain respects, which lead us to class the sparrow and the ostrich, however different in other respects, as birds ; or the petty natives of our brooks and rivulets with the mighty monsters of the deep, under one

general and equal denomination? If this be the reason, there is more, in every case, than perception, and the giving of a general name; for there is a peculiar state of mind—a general relative feeling—intervening between the perception and the invention of the term, which is the only reason that can be assigned for that very invention. Can the Nominalist then assert, that there is no feeling of the resemblance of objects, in certain respects, which thus intervenes between the perception of them as separate objects, which is one stage of the process, and the comprehension of them under a single name, which is another stage of the process,—or must he not rather confess, that it is merely in consequence of this intervening feeling we give to the number of objects their general name, to the exclusion of the multitudes of objects to which we do not apply it, as it is in consequence of certain other feelings, excited by them individually, we give to each separate object its proper name, to the exclusion of every other object? To repeat the process, as already described to you, we perceive two or more objects,—we are struck with their resemblance in certain respects. We invent a general name to denote this feeling of resemblance, and we class under this general name, every particular object, the perception of which is followed by the same feeling of resemblance, and no object but these alone. If this be a faithful statement of the process,—and for its fidelity I may safely appeal to your consciousness,—the doctrine of the Nominalists is not less false than that of the Realists. It is false, because it excludes that general feeling of resemblance,—the relative suggestion,—which is all that the general name itself truly designates, and without which, therefore, it never would have been invented; while the doctrine of the Realists is false, by inserting in the process those supposed separate entities, which form no part of it. The one errs, as I have already said, by excess, the other by deficiency.”

§. 207. *Of histories of philosophical opinions.*

We pass from the view, which has been given of different opinions on the subject of general abstract ideas, to remark on certain histories of philosophical opinions in general. We consider the great principles of intellectual philosophy at present for the most part well settled, and whatever discrepancies apparently exist, as owing in a majority of cases rather to differences of statement than differences of belief. But still it is sometimes important to look back and see what has in former times been said and thought; an exercise, which cannot fail to evince the strength of prejudices, the evident fallibility of the understanding, and the necessity of cherishing a sincere love of truth.

In the following works will be found all that will be necessary to be known concerning the dispute on general or universal ideas, as also the history of other philosophical controversies and opinions almost without number. The most part of them at present excite not the least interest, except as memorials of the struggles of the human mind in past ages.

(1) *Bayle's Historical and Critical Dictionary*.—This great work was first published in two folio volumes in 1697. It consists of two parts; one of which is a concise narration of facts, and the other a sort of commentary on them. The work contains very numerous illustrations of the history of philosophy, and treats many difficult subjects with independence and ability. And still we find some difficulty in mentioning it with much commendation, since, in the opinion of a most competent judge, it has a tendency to unsettle the principles of superficial readers, and to damp the moral ardour of youth by weakening their belief in the reality of virtue.

(2) *Brucker's Critical History of Philosophy*.—This work was first published at Leipsic in 1744 in Latin, extending through five quarto volumes. The author gives a biographical sketch of the lives of different ancient and modern philosophers, reviews their writings, and explains

their particular systems. This great work, the result of fifty year's labour of a hard and honest student, is particularly valuable, as a book of reference for those, who have devoted themselves to philosophical researches. There has been published an abridged translation of it into English by Enfield.

(3) *M. De Gerando's History of Philosophical Systems.*—This work, first published in 1802, is in French, and we know not, that it has ever been translated, but on account of its acknowledged merits it cannot well be passed by; and also because it is frequently referred to by English writers on these subjects. M. De Gerando does not undertake to give a complete account of the progress of intellectual science; his main object seems to be to recapitulate the opinions of the most eminent ancient and modern philosophers on a particular point, viz. the sources and certainty of knowledge. His work is divided into five periods.—The first period comprises the time anterior to Socrates; the second comes down to the age of Cicero; in the third, which ends with the close of the seventh century, we have an account of the decline and fall of philosophy; the fourth reaches from the seventh century to the time of Des Cartes and Bacon; the fifth and last continues the subject to the present century. An opinion of the value of this work, and a translation of some extracts from it, are given in the North American Review of April, 1824; which can be consulted by those, who wish to know further.

(4) *Stewart's Progress of Metaphysical, Ethical, and Political Philosophy.*—This interesting work originally appeared in the form of a Preliminary Dissertation to the supplemental volumes of the Encyclopædia Britannica; and includes merely the period since the revival of letters in Europe. As one reason for limiting his retrospect to a period extending no further back than the revival of letters, the writer expresses an opinion, that the sciences, of which he treats, present but little matter for useful remark, prior to the time of Lord Bacon.—Perhaps no one of the excellent works of Mr. Stewart is more worthy the student's

attention than this ; whether we consider the richness and polish of his style, or that admirable discrimination, with which he detects, apparently by a sort of kindred intuition, the characteristics both of systems and of individual minds.—There are also, both in the English and foreign languages, other works and treatises of greater or less extent and value, which may profitably be referred to in examining the history of philosophical opinions.

CHAPTER EIGHTEENTH.

OF DREAMING.

§. 208. *A knowledge of our dreams interesting.*

DREAMS are our mental states or operations while we are asleep. They are among the most curious phenomena of the mind, and there is much difficulty at present in giving a full and satisfactory explanation of them.—The intellectual states, which go under this name, have ever excited much interest, and a man no less wise and practical than Dr. Franklin has written a characteristic piece, entitled, *The Art of procuring Pleasant Dreams*. But the further one goes back into antiquity, the interest taken in them, especially among the ignorant, will be found to be increased. We learn in the earliest records of history, that they were regarded as supernatural, and as conveying prophetick intimations. This notion still lingers among the common people even to our own times, although in a diminished degree ; and even men of information and of some tincture of philosophy have not always been wholly undisturbed by them.

So great was the superstition respecting dreams among the Romans, that the emperor Augustus, who might have been expected to rise above it, took particular notice of the time of year, when his dreams were most unfavoura-

ble. It is also said of him, that, on a certain day of every year, he acted the part of a publick beggar, in consequence of a vision, and received alms of those, who were willing to give him small sums of money. In the reign of Antoninus Pius, one Artemidorus spent his whole time in going about collecting dreams and finally published the fruits of his labours in a large work still extant entitled *ONEIROCRITUS*. The superstitions among the Ancients in respect to dreams were very similar to what have been found to exist among the Indian tribes of North America. —But, laying out of the account the superstitions, which have given to our intellectual operations while we are asleep so much importance, there are other reasons for taking an interest in them, of which the philosopher need not be ashamed. And of these one is enough to justify us in this inquiry ; viz. That dreams form no inconsiderable part of our intellectual experiences, and all the knowledge of them which we acquire is an accession to our knowledge of the principles of the mind in general.

§. 209. *Of the prevalence of dreaming.*

It is perhaps one reason of the attention, which the subject of our dreams has ever excited, among all classes of people, that they are so prevalent ; it being very difficult, if not impossible, to find one, who has not had more or less of this experience. Mr. Locke, however, tells us of a person, who never dreamed till the twenty sixth year of his age, when he happened to have a fever, and then dreamed for the first time. Plutarch also mentions one Cleon, a friend of his, who lived to an advanced age, and yet had never dreamed once in his life, and remarks, that he had heard the same thing reported of Thrasymedes.

Undoubtedly these persons dreamed very seldom, as we find that some dream much more than others ; but it is possible, that they may have dreamed at some times, and entirely forgotten it. So that it cannot with certainty be inferred from such instances as these, that there are any, who are entirely free from dreaming.

§. 210. *Dreams are often caused by our sensations,*

The first fact, which we notice in the explanation of the mental states, which go under the name of dreaming, is, that they are intimately connected with our bodily sensations, and are often caused by them.

Dugald Stewart relates an incident, which may be considered an evidence of this, that a person, with whom he was acquainted, had occasion, in consequence of an indisposition, to apply a bottle of hot water to his feet, when he went to bed, and the consequence was, that he dreamed he was making a journey to the top of mount *Ætna*, and that he found the heat of the ground almost insupportable. There was once a gentleman in the English army, who was so susceptible of audible impressions, while he was asleep, that his companions could make him dream of what they pleased. Once, in particular, they made him go through the whole process of a duel, from the preliminary arrangements to the firing of the pistol, which they put into his hand for that purpose, and which, when it exploded, waked him.

Sometimes the impressions on our senses do not merely suggest our dreaming thoughts and give a character to them, but appear to mingle with, and make a part of the train. If a person speak to us when in sleep, but his call is not effectual in waking us, the voice sometimes becomes an additional portion of our sleeping experiences.

A cause of dreams closely allied to the above is the variety of sensations, which we experience from the stomach, viscera, &c.

Persons, for instance, who have been for a long time deprived of food, or have received it only in small quantities hardly enough to preserve life, will be likely to have dreams, in some way or other directly relating to their condition. Baron Trenck relates, that being almost dead with hunger, when confined in his dungeon, his dreams every night presented to him the well filled and luxurious tables of Berlin, from which, as they were presented before him, he imagined he was about to relieve his hunger.

§. 211. *Dreams influenced by disposition, health, &c.*

It is a circumstance worthy of notice, that the character of dreams depends in a considerable measure on the character of the person himself, whether he be cheerful, or inclining to melancholy; whether he be a great reasoner, or of a quick and creative imagination. And, accordingly, as the one or the other of these characteristics predominates, the person dreaming will be apt to find himself in sad or joyful situations, creating airy castles or puzzling himself over difficult propositions, or in such other circumstances, as may correspond to his previous mental tendencies.

The state of the health also has considerable influence, not only in producing dreams, but in giving them a particular character. The observation has been made by medical men, who have it in their power to give much information, illustrative of our mental condition, that acute diseases, particularly fevers, are often preceded and indicated by disagreeable and oppressive dreams; and also that some temperaments are more subject to dreams than others; the sanguine more frequently than the phlegmatick.

§. 212. *Connection of dreams with our waking thoughts.*

The great multitude of our waking thoughts appear in the form of trains of associations; and these trains of associated ideas, in greater or less continuity, and with greater or less variation, continue when we are asleep. The facts stated in the preceding section are an evidence of this, it appearing from them, that our dreams assume a character from our general disposition and mental habits.

There is also another circumstance going in evidence of this supposition. We find none of our associated recollections more strongly linked to each other and more frequently presenting themselves to the mind, than the remembrances of the scenes and occurrences of childhood and youth. And it has been remarked (probably with truth) that

those scenes and occurrences occur to the mind in our dreams more frequently than almost any others.

It has been observed, that there are probably few mathematicians, who have not dreamed of an interesting problem. Condorcet told some one, that, while he was engaged in abstruse and profound calculations, he was frequently obliged to leave them in an unfinished state, in order to retire to rest; and that the remaining steps and the conclusion of his calculations have more than once presented themselves in his dreams.—Franklin also has made the remark, that the bearings and results of political events, which had caused him much trouble while awake, were not unfrequently unfolded to him in dreaming. The orator presses home his arguments with renewed energy, when his senses are locked up in slumber; and the poet finds himself transported into those Elysian regions, which were created by his waking imaginations.

It seems clearly to follow from some circumstances of this kind, that our dreams are fashioned from the materials of the thoughts which we have while awake; in other words, they will, in a great degree, be merely the repetition of our customary and prevailing associations.

§. 213. *Dreams have the appearance of reality.*

When objects are presented to us in dreams, we look upon them as real; and events, and combinations and series of events appear the same. We feel the same interest and resort to the same expedients, as in the perplexities or enjoyments of real life. When persons are introduced, as forming a part in the transactions of our dreams, we see them clearly in their living attitudes and stature; we converse with them, and hear them speak, and behold them move, as if actually present.

The prominent reasons of this greater vividness of our dreaming conceptions, and our firm belief in their reality seem to be these.—The subjects, upon which our thoughts are then employed, occupy the mind exclusively. We can form a clearer conception of an object with our eyes

shut, than we can with them open, as any one will be convinced on making the experiment; and the liveliness of the conception will increase in proportion as we can suspend the exercise of all the other senses.

But in sound sleep, not only the sight, but the other senses also may be said to be closed; and the attention is not continually diverted by the multitude of objects, which arrest the hearing and touch, when we are awake.

It is, therefore, a most natural supposition, that our conceptions must at such times be extremely vivid and distinct. At §. 190, we particularly remarked upon conceptions or those ideas which we have of absent objects of perception, which possess this character. And it there appeared, that they might be attended with a momentary belief even when we are awake. But as conceptions exist in the mind when we are asleep in a much higher degree distinct and vivid, what was in the former case a momentary, becomes in the latter a permanent belief.—Hence every thing has the appearance of reality; and the mere thoughts of the mind are virtually transformed into persons, and varieties of situation, and events, which are regarded by us in precisely the same light, as the persons, and situations, and events of our every day's experience.—And here we have an explanation of what many individuals have experienced. They endeavour to recall the image of some departed friend, but their efforts are in a great measure unavailing, and they find they have but a very indistinct conception. On the contrary in sleep, when the mind is undisturbed by surrounding objects, the conception gathers strength; it becomes more and more distinctly defined and bright; and there is a clear vision of the form, which they had deeply thought upon, and long wished to see.

§. 214. *Influence of volition suspended in dreaming.*

There is frequently much of wildness, inconsistency, and contradiction in our dreams. The mind passes very rapidly from one object to another; strange and singular

incidents occur, and yet in general there is no emotion of surprise. If our dreams be truly the repetition of our waking associations, it may well be inquired, how this wildness and inconsistency happen?

The fact, which explains this, is, that, when we are asleep, our associated trains of thought are no longer under the control of the mental power or susceptibility, which we term the *WILL*. We do not mean to say, that the susceptibility, by which we exercise volitions, or the *WILL* itself is suspended, and has no existence at such times.—On the contrary, there is sufficient evidence of the continuance of its exercises in some degree; since volitions must have made a part of the original trains of thought, which are repeated in dreaming; and furthermore, we are often as conscious of exercising or putting forth volitions when dreaming as of any other mental acts, for instance, imagining, remembering, assenting, or reasoning. When we dream, that we are attacked by an enemy sword in hand, but happen as we suppose in our dreaming experiences, to be furnished in self-defence with an instrument of the same kind, we dream, that we *will* to plunge it into the body of our antagonist, and we as truly in this case put forth the mental exercise which we term a *volition*, as, in any other, we exercise remembrance, or imagine, or reason in our sleep.

But admitting that the power or susceptibility of willing is entirely retained in sleep, it is quite evident, that the volitions, which are put forth by it, have ceased to exercise their customary influence, both in respect to other mental acts, and, particularly, in regard to the members of the body. Of the general truth of the last remark no one presumes to doubt. It is indeed true, that our vital and involuntary motions go on essentially the same as when we are awake, but it is unnecessary to observe, that these do not come into consideration here. The regulation of the voluntary movements of the members of the body is placed beyond our reach, with some slight exceptions hereafter to be mentioned.—In regard to the other point, it will be remembered, that we have already consid-

ered it at §. 173, which concerned the power of the will over our associated trains of thought. The conclusion, to which we there arrived, was, that, although we have no direct, we have an indirect power over the successions of thought, which is very considerable; for instance, we fix our attention upon some particular part of any general subject, which has been suggested, and thus give a new direction to the whole train of mental operations. Although this power, which we thus exercise, is indirect, we justly consider it a voluntary power, and attribute it to the faculty of the will. But the moment we are soundly asleep, this influence ceases, and hence arise the wildness, incoherency, and contradictions in dreaming, which have been mentioned.

A person while he is awake has his thoughts, (admitting to the full extent the power, which is commonly ascribed to association,) under such government, and is able, by the indirect influence of volitions, so to direct them, as to bring them in the end to some conclusion, which he foresees and which he wishes to arrive at. But in dreaming, as all directing and governing influence is at an end, our associations seem to be driven forward, much like a ship at sea without a rudder, wherever it may happen.

§. 215. *Further remarks on apparent reality of dreams.*

The striking circumstance, that our dreams have the appearance of reality, has already been noticed; and an explanation given. If that explanation, allowing to it its full weight, should appear to any hardly sufficient to explain so extraordinary a fact, the last section suggests another reason, which may be supposed to combine its influence with that of the explanation already proposed, viz. *Our conceptions have to us the appearance of reality when dreaming, because they cannot be controlled, either directly or indirectly, by our volitions.*—We cannot admit this as the sole reason of the belief, but suppose, it combines its influence with that of the circumstances already mentioned, and that this influence may be very considerable.

But still the question remains to be looked into.—How does it happen, that our dreaming thoughts appear to be real, because they are not in any way controllable by volitions?—In answer to this inquiry, it is to be observed, that we are so formed as almost invariably to associate reality with whatever objects of perception continue to produce in us the same effects. A hard or soft body, or any substance of a particular colour, or taste, or smell, are always, when presented to our senses, followed by certain states of mind essentially the same; and we yield the most ready and firm belief in the existence of such objects. In a word, we are disposed from our very constitution to believe in the existence of objects of perception, the perceptions of which do not depend, on the WILL, but which we find to be followed by certain states of the mind, whether we choose it or not.—But it is to be recollected, that our dreaming thoughts are mere conceptions; our senses being closed and shut up, and external objects not being presented to them. This is true. But if we conclude in favour of the real existence of objects of perception, because they produce in us ideas independently of our volitions, it is but natural to suppose, that we shall believe in our conceptions also, whenever they are in like manner beyond our voluntary control. They are both merely states of the mind; and if belief always attends our perceptions, wherever we find them to be independent of our choice, there is no reason, why conceptions, which are ideas of absent objects of perception, should not be attended with a like belief under the same circumstances.—And essentially the same circumstances exist in dreaming; that is, a train of conceptions arises in the mind, and we are conscious at such times of being unable to exercise any direction or control whatever over them.

§. 216. *Of our estimate of time in dreaming.*

Our estimate of time in dreaming differs from that when awake. Events, which would take whole days or a longer time in the performance, are dreamt in a few mo-

ments. So wonderful is this compression of a multitude of transactions into the very shortest period, that, when we are accidentally awakened by the jarring of a door, which is opened into the room where we are sleeping, we sometimes dream of depredations by thieves, or of destruction by fire, in the very instant of our awaking.—Our dreams will not unfrequently go through all the particulars of a passage of the Alps, or of a military expedition to Moscow, or of a circumnavigation of the globe, or of other long and perilous undertakings, in a less number of hours, than it took weeks, or months, or even years in the actual performance of them. We go from land to land, and from city to city, and into desert places; we experience transitions from joy to sorrow, and from poverty to wealth; we are occupied in the scenes and transactions of many long months; and then our slumbers are scattered, and, behold, they are the doings of a single watch of the night!

This striking circumstance in the history of our dreams is generally explained by supposing, that our thoughts, as they successively occupy the mind, are more rapid, than while we are awake. But their rapidity is at all times very great; so much so, that, in a few moments, crowds of ideas pass through the mind, which it would take a long time to utter, and a far longer time would it take to perform all the transactions, which they concern. This explanation, therefore, is not satisfactory, for our thoughts are oftentimes equally rapid in our waking moments.

The true reason, we apprehend, is to be found in those preceding sections, which took under examination the apparent reality of dreams. Our conceptions in dreaming are considered by us real; every thought is an action; every idea is an event; and successive states of mind are successive actions and successive events. He, who in his sleep has the conception of all the particulars of a military expedition to Moscow, or of a circumnavigation of the globe, seems to himself to have actually experienced all the various and multiplied fortunes of the one and the other. Hence what appears to be the real time in dreams, but is only the apparent time, will be, not that, which is

sufficient for the mere thought, but that, which is necessary for the successive actions.

“Something perfectly analogous to this may be remarked (says Mr. Stewart) in the perceptions we obtain by the sense of sight. When I look into a shew-box, where the deception is imperfect, I see only a set of paltry daubings of a few inches in diameter; but if the representation be executed with so much skill, as to convey to me the idea of a distant prospect, every object before me swells in its dimensions, in proportion to the extent of space, which I conceive it to occupy, and what seemed before to be shut within the limits of a small wooden frame, is magnified, in my apprehension, to an immense landscape of woods, rivers, and mountains.”

§. 217. *Of the senses sinking to sleep in succession.*

It has been remarked, that in sleep the mind ceases to retain its customary power over the muscular movements of the system; and all the senses also are at such times locked up, and no longer perform their usual offices. The effect upon the senses is such, that it seems to be proper to speak of them as individually going to sleep and awaking from sleep.—It remains, therefore, to be observed, that there is some considerable reason to suppose, that the senses fall asleep in succession.—For a detailed explanation and proof of this singular fact, reference must be had to Cullen, and particularly to Cabanis, a French writer on subjects of this nature; but the conclusions, at which they arrive on this particular point, may be here stated.

The sight, in consequence of the protection of the eyelids, ceases to receive impressions first, while all the other senses preserve their sensibility entire; and may, therefore, be said to be first in falling asleep. The sense of taste, according to the above writers, is the next, which loses its susceptibility of impressions, and then the sense of smelling. The hearing is the next in order, and last of all comes the sense of touch.

Furthermore, the senses are thought to sleep with dif-

ferent degrees of profoundness. The senses of taste and smelling awake the last; the sight with more difficulty than the hearing, and the touch the easiest of all. Sometimes a very considerable noise does not awake a person, but if the soles of his feet are tickled in the slightest degree, he starts up immediately.

Similar remarks are made, by the writers above referred to, on the muscles. Those, which move the arms and legs, cease to act, when sleep is approaching, sooner than those, which sustain the head; and the latter before those, which support the back.—We may notice here an exception to the general statement at the commencement of this section, that the mind in sleep ceases to retain its power over the muscles. Some persons can sleep standing, or walking, or riding on horseback; with such we cannot well avoid the supposition, that the voluntary power over the muscles is in some way retained and exercised in sleep.—These statements are particularly important in connection with the facts of somnambulism; only admit, that the susceptibility of the senses, and the power of the muscles may remain even in part while we are asleep, and we can account for them. We know, that this is not the case in a vast majority of instances, but that it does sometimes happen, is a point, which seems at last to be sufficiently well established.

§. 218. *Remarks on Somnambulists.*

SOMNAMBULISTS are persons, who are capable of walking and other voluntary actions while asleep.—Some of the facts in respect to them are these.—The senses are in general closed, and not susceptible of being affected by outward objects, much the same as in ordinary sleep; with some slight exceptions, however, hereafter to be mentioned. Hence, the somnambulist walks, and performs other voluntary actions without the use of vision; and yet in some cases he has his eyes open, but is still unable to see. Doing the works of day at unseasonable hours, he piles up his wood at midnight, or yokes his oxen, or goes to mill, and

all the while is as profoundly asleep as any of his neighbours; until he falls over some obstacle at his feet, or rides against a tree, or is in some other way brought to his recollection. He is not certain of walking in safe places, but may sometimes be found on the roof of houses or on the edge of precipices, but evidently with an utter insensibility to terrour. He is a sort of automatick machine, that is carried about from place to place, but without feeling, vision, hearing, or other exercises of the senses; and still more without calculation, or any thing, which may be truly called reason; always excepting such calculation and reasoning as may be found in dreams.

NOTE.—The following is an instance of somnambulism, which recently took place, of an extraordinary character.—A farmer in one of the counties of Massachusetts had employed himself, for some weeks in winter, thrashing his grain. One night as he was about closing his labours, he ascended a ladder to the top of the great beams in the barn, where the rye, which he was thrashing, was deposited, to ascertain what number of bundles remained unthrashed, which he determined to finish the next day. The ensuing night, about two o'clock, as was supposed, he was heard by his mother to get up and go out, who had no further recollection of him during the night.—He repaired to his barn, being in sound sleep, and altogether unconscious of what he was doing, set open his barn doors, ascended the ladder as he had done the day before, went on to the hay-mow, thence on to the great beams of the barn where the said rye was deposited, and threw down a flooring, and again descended and commenced thrashing it. When he had completed it, he raked off the straw, and bound it into bundles, and shoved the rye to one side of the floor, and then carried the straw up the ladder and deposited it on some rails, that lay across the great beams. He then threw down another flooring of rye, which he thrashed and finished as before. Thus he continued his labours until he had thrashed five floorings, and on returning from throwing down the sixth and last, in passing over part of the hay-mow, he fell off, where the hay had been cut down about six feet, on to the lower part of it, which awoke him. He at first imagined himself in his neighbour's barn, but after groping about in the dark for a long time, ascertained that he was in his own, and at length found the ladder, on which he descended to the floor,—closed his barn doors, which he found open, and returned to his house.—On coming to the light, he found himself in such a profuse perspiration, that his clothes were literally wet through,—he went to bed, and the next morning on going to his barn, found that he had thrashed, during the night, five bushels of rye,—had raked the straw off in good order, and deposited it on the great beams, and shoved the grain to one side of the floor, all in a workmanlike manner, without the least consciousness of what he was doing, until he fell from the hay.

Of such persons many instances are on record, and of some a particular account is given;—the accompanying instance in the note will help to illustrate the above assertions, which, as a general statement, are sufficiently near the truth.—The explanation which seems on the whole the most satisfactory, is this; viz. (1) The somnambulist is in all cases dreaming, and we may suppose in general, that the dream is one, which greatly interests him.—(2) Those volitions, which are a part of his dreams, retain their power over the muscles, which is not the fact with other people.—Consequently, whatever the somnambulist dreams is not only real in the mind, as in all other dreamers, but his ability to exercise his muscles enables him to give it a reality in action. Whether he dream of writing a letter, or of visiting a neighbour's house, or even of thrashing out his wheat, his muscles are faithful to his vivid mental conceptions, which we may suppose in all cases closely connected with his customary labours and experiences, and carry him pretty safely through the operation, however sightless may be his eye, or dull his other senses.

Further—We are not to forget here a remark on the sleep of the senses, already alluded to, and which is an exception to the general statement in regard to them. Both in somnambulism and in ordinary cases of dreaming the senses are not always entirely locked up; many observations clearly show, that it is possible for the mind to be accessible through them, and that a new direction may be given in this way to a person's dreams without awaking him. Hence somnambulists may sometimes have very slight visual perceptions; they may in some slight measure be guided by sensations of touch; all the senses may be affected in a small degree by their appropriate objects, or this may be the case with some and not with others, without effectually disturbing their sleep.—These facts will be found to help in explaining any circumstances, which may be thought not to come within the reach of the general explanation above given.

§. 219. *Of the utility of dreams.*

It is a common opinion, that nature does nothing in vain. Without doubting the general truth of this sentiment, some have, nevertheless, found it difficult to discover any practical utility in dreams. But, on the contrary, others have not been so sceptical.—Dr. Beattie assures us, that dreaming is not without its uses, though we should never be able to discover them; and one would think from some remarks of Franklin, that he was pretty much of the same opinion.—The former writer imagines among other benefits, that they sometimes convey moral instruction, and refers in support of his opinion to a fine moral tale in the *Tatler*, given in the form of a dream. He further thinks, that they may sometimes convey intimations of good or evil results in the conduct of life, which are not to be altogether disregarded. Condorcet and others have from their own experience mentioned their aid in the solution of difficult problems; and the poetical writers have so frequently beheld

“Most beauteous beings in their hours of sleep.”

that one is almost persuaded to believe, that we should have had less bright poetick creations, if they had not been real dreamers.

But however this may be, whether they be useful or not, they are in general harmless, and sometimes amusing; and perhaps we ought not to be too confident of their inutility, until we know more about them. As to any evil effects resulting from dreaming, only be temperate in food, abundant in exercise, and follow Franklin's advice in the article of a *good conscience*, and almost any one would be willing to insure against them.

CHAPTER NINETEENTH.

DEMONSTRATIVE REASONING.

§. 220. *Of truth and different kinds of it.*

There is no small difficulty in giving a definition of truth, which will be satisfactory to all. The following is perhaps as unexceptionable as any;—**TRUTH** is the conformity of our thoughts or mental states to things, as they actually exist.—Agreeably to this definition, we may say of any propositions whatever, whether expressed in words or merely mental, that they are *true*, whenever they represent things, as they are. And, consequently, all are necessarily either true or false, being either conformed or not conformed to the nature and state of things.—**Truth** does not depend upon belief. The proposition, that redness is a quality inherent in a soldier's coat, is, no doubt, firmly believed by many, but is not true in the sense, in which it is generally understood to be so. We have already seen, that this and other colours are sensations in the mind. The belief, which people have in regard to it, does not affect the truth of the proposition itself.—**TRUTH** has by some writers been divided into two kinds, viz. *necessary* and *contingent*.—Necessary truths are such as always exist the same, and can neither be caused, nor annulled by the will of any being whatever. The proposition, that the three angles of a triangle are equal to two right ones, expresses a truth of this kind.—Contingent truths have relation to those things, which are not necessarily permanent. The proposition, that the world exists, expresses a truth of this description.

§. 221. *Of the ways in which truth is discovered.*

TRUTH seems to be but another name for knowledge; and among the means, which a beneficent Providence has

put into our hands for the acquisition of it, the three following are the most considerable, viz. THE SENSES, INTUITION, and REASONING.

All our knowledge commences with the senses, as the ideas from this source are prior to any others; without them we do not readily perceive, how our minds could ever have been called into action. If the senses be one of the appointed means of conveying to us truth or knowledge, then we must suppose, that they give us ideas of things, as they actually exist. Nothing can be more evident, than that they give us such ideas of things, as our Maker intended they should; and if in any case we can trace the foundation of our knowledge to the intention or will of Him, who gave us the capacity of knowledge, we ought to be satisfied.—By means of the senses we first become acquainted with external objects, with their form, and some of their various qualities, and properties; so that we originally owe to them those notions, which we have of all the multiplied and wonderful works of creation.

It may perhaps be objected, that we derive erroneous notions of things from the senses in the case of colours, and in some other instances; and that, therefore, the senses cannot be safely regarded, as a foundation or source of knowledge. In reply we observe, that our misapprehensions of colours are not so much owing to the senses, as to the principles of association; and it is altogether clear, that our Maker has given us the power, whenever our mental susceptibilities are fully and happily developed, of correcting all such misapprehensions of whatever origin.—See the chapters on PRIMARY TRUTHS, and on CASUAL CONNECTIONS OF THOUGHT.

§. 222. *Of truth or knowledge from intuition.*

We have knowledge also or new discoveries of truth from INTUITION. This is the name given to the state or operation of the mind, when there is an immediate perception of the agreement or disagreement of two or more ideas, without the intervention of any third idea. For in-

stance,—“three and three are six,”—“things equal to the same are equal to one another,”—“the whole is greater than a part.” In these propositions and others like them, it is at once perceived by the mind, that there is an agreement of ideas, or that what is expressed in the predicate is compatible with what is expressed in the subject of the proposition. On such propositions no deductions of reasoning can confer any additional evidence.

Intuition is nothing more than one of the exercises of that susceptibility, which, we have already seen, the mind possesses of feeling the relation among different objects. We refer here to §. 199, in the chapter on **ABSTRACT IDEAS**. Hence we notice the mind to be in that state, to which we give the name of intuition, in the perception of the identity and diversity of objects, also of their resemblance or co-existence, and in the perception of the relations of quantity and number, and of cause and effect.

We increase our knowledge or have new discoveries of truth, in the third place, by reasoning.—**REASONING** is that mental process, by which unknown truths are inferred from those, which are already known or admitted.—It is divided into two kinds, viz. **DEMONSTRATIVE REASONING**, and **MORAL REASONING**. In this chapter we confine ourselves to demonstrative reasoning.

§. 223. *Definition of propositions and kinds of them.*

But before we can enter with advantage on the subject of reasoning, it is necessary to go into a brief explanation of propositions, which are the subordinate parts in every process of that kind.—A **PROPOSITION** has been defined to be a verbal representation of some perception, act, or affection of the mind.—Mr. Locke also speaks of mental propositions, or those states of mind, where two or more ideas are compared together, previous to their being embodied and set forth in language.

The parts of a proposition are,—(1) The **SUBJECT**, or that, concerning which something is either asserted, or denied, commanded, or inquired ;—(2) The **PREDICATE**, or

that, which is asserted, denied, commanded, or inquired concerning the subject ;—(3) The **COPULA**, by which the two other parts are connected.—In these two propositions,

Cæsar was brave,

Men are fallible,

Men and *Cæsar* are the subjects ; *fallible* and *brave* are the predicates ; *are* and *was* are the copulas.

Propositions have been divided,—(1) Into **SIMPLE** or those, whose subject and predicate are composed of single words, as in this

Benevolence is commendable ;—

(2) Into **COMPLEX**, or those, where the subject and predicate consist of a number of words, as in this,

Faithfulness in religion is followed by peace of mind ;—

(3) Into **MODAL**, where the copula is qualified by some word or words, representing the manner or possibility of the agreement or discrepancy between the subject and predicate, as in these,

Men of learning *can* exert influence ;

Wars *may* sometimes be just.—

PROPOSITIONS, more or less involved, are necessary parts in every process of reasoning. They may be compared to the separate and disjointed blocks of marble, which are destined to enter into the formation of some edifice. The completed process of reasoning is the edifice ; the propositions are the materials.

§. 224. *Use of definitions and axioms in demonstrative reasoning.*

Demonstrative reasonings are chiefly found in mathematics ; and the first principles of them are definitions. We can never have a demonstration of the properties of a circle, parabola, ellipse, or other mathematical figure, without first having given a definition of them.—The **FIRST PRINCIPLES** of any science are those propositions, whether facts or merely assumed, from which the remoter truths of that science are derived. Thus in Natural Philosophy the general facts in relation to the gravity and elasticity of the air may, agreeably to this explanation, be

considered as first principles. From these principles in Physicks are deduced, as consequences, the suspension of the mercury in the barometer, and its fall, when carried up to an eminence.—And agreeably to the same explanation, definitions, which may be considered in the light of facts assumed, are the foundation of demonstrative reasonings, or are those propositions, from which by means of the subsequent steps the conclusion is derived.

We must not forget here the use of axioms in the demonstrations of mathematicks;—these are certain self-evident propositions, or propositions, the truth of which is discovered by intuition, such as the following;—“Things equal to the same are equal to one another.”—“From equals take away equals, and equals remain.” We generally find a number of them prefixed to treatises of geometry; and it has been a mistaken supposition, which has long prevailed, that they are at the foundation of geometrical, and of all demonstrative reasoning. But axioms, taken by themselves, lead to no conclusions. With their assistance alone, it cannot be denied, that the truth, involved in propositions susceptible of demonstration, would have been beyond our reach.

But axioms are by no means without their use, although their nature may have been misunderstood. They are properly and originally intuitive perceptions of the truth, and whether they be expressed in words, as we generally find them, or not, is of but little consequence, except as a matter of convenience to beginners, and in giving instruction. But those intuitive perceptions, which are always implied in them, are essential helps; and if by their aid alone we should be unable to complete a demonstration, we should be equally unable without them. We begin with definitions; we compare together successively a number of propositions; and these intuitive perceptions of their agreement or disagreement, to which, when expressed in words, we give the name of axioms, attend us at every step.

or the conclusion, and the conditions involved in the propositions at the commencement of the series ;—and therefore, demonstrative certainty is in effect the same as the certainty of intuition.

§. 229. *Of the use of diagrams in demonstrations.*

Mr. Locke has advanced the opinion, that moral subjects are no less susceptible of demonstration, than mathematical. However this may be, we are certainly more frequently required to practice this species of reasoning in the mathematicks, than any where else ; and in conducting the process, nothing is more common, than to make use of various kinds of figures or diagrams.—The proper use of diagrams, of a square, circle, triangle, or other figure, which we delineate before us, is to assist the mind in keeping its ideas distinct, and to help in comparing them together with readiness and correctness. They are a sort of auxiliaries, brought in to the help of our intellectual infirmities, but are not absolutely necessary ; since demonstrative reasoning, wherever it may be found, resembles any other kind of reasoning in this most important respect, viz. in being a comparison of our ideas.—In proof that artificial diagrams are only auxiliaries, and not essentially necessary in demonstrations, it may be remarked, that they are necessarily all of them imperfect, owing to the imperfection of our senses. Our reasonings, therefore, and our conclusions will not apply to the figures before us, but merely to an imagined perfect figure. And a verbal statement of the properties of this imagined perfect figure is what we understand by a DEFINITION, the use of which in this kind of reasoning in particular has already been mentioned.

§. 230. *Influence of demonstrative reasoning on the mental character.*

A considerable skill in demonstrative reasoning is on a number of accounts desirable, although it cannot be denied, that very frequent practice and great readiness in it

is not always favourable ; so that it seems proper briefly to mention the effects, both propitious and unpropitious, on the mental character.—(1) A frequency of practice in demonstrative reasoning greatly aids in giving one a ready command of his attention.—In this species of reasoning, the propositions follow each other in such regular order and so closely, and so great is the importance of perceiving the agreement or disagreement of each succeeding one with that, which goes before ; that a careless, unfixed, and dissipated state of the mind seems to be utterly inconsistent with carrying on such a process with any sort of success to the conclusion. As, therefore, the strictest attention is here so highly necessary, the more a person subjects himself to this discipline, the more ready and efficient will be the particular application of the mind, to which we give that name.—And we often find distinguished individuals in political life and in the practice of the law, who are desirous of holding their mental powers in the most prompt and systematick obedience, imposing on themselves exercises in geometry and algebra for this purpose.

(2) This mode of reasoning accustoms one to care and discrimination in the examination of subjects.—In all discussions, where the object is to find out the truth, it is necessary to take asunder all the parts, having relation to the general subject, and bestow upon them a share of our consideration. And in general we find no people more disposed to do this than mathematicians ; they are not fond of reasoning, as Mr. Locke expresses it, in the lump, but are for going into particulars, for allowing every thing its due weight and nothing more, and for resolutely throwing out of the estimate all propositions, which are not directly and truly to the point.—It must further be said, as a general remark closely connected with what has just been observed, that those departments of science, which require demonstrative reasoning, are promotive of a characteristic of great value,—a love of the truth.

(3) Demonstrative reasoning gives to the mind a greater grasp or comprehension. This result it is true, will not be experienced in the case of those, who have merely ex-

exercised themselves in the study of a few select demonstrations ; it implies a familiarity of the mind with long and complicated trains of deductions. A thorough mathematician, who has made it a business to exercise himself in this method of reasoning, can hardly have been otherwise than sensible of that intellectual comprehension, or length and breadth of survey, which we have in view ; since one demonstration is often connected with another, much in the same way as the subordinate parts of separate demonstrations are connected with each other ; and he, therefore, finds it necessary, if he would go on with satisfaction and pleasure, to gather up and retain, in the grasp of his mind, all the general and subordinate propositions of a long treatise.

But, on the other hand, there are some results of a very great attention to sciences, which require the exclusive application of demonstrative reasoning, of a less favourable kind.

(1) It has been thought, that it has a tendency to render the mind mechanical ;—That is, while it increases its ability of acting in a given way, it diminishes the power of invention, and prevents its striking out into a new path, different from that, which it has been in the habit of going over.—(2) It nourishes a spirit of scepticism ; or perhaps we may say, diminishes the power of belief. The exclusive mathematician has been accustomed to yield his assent to demonstration only ; and it is but natural, that he should find some difficulty in being satisfied with any lower degree of evidence. This disposition to doubt will be, in some measure, experienced, even in the transition from pure to mixed mathematicks, at least there will be an absence of that full and delightful satisfaction, which had hitherto been enjoyed. Still more will it be felt, when he is called upon to judge of events, and duties, and actions of common life, which do not admit of the application of demonstration.—In a word, it has been supposed to unfit the mind in a considerable degree for accurate discriminations as to moral evidence on all subjects whatever, where that species of evidence is alone admissible ; and also for fair and correct judgments in matters of taste.

Such, on the whole, being the results of an exclusive attention to sciences, which admit of demonstrations alone, a restricted pursuit of them is all, that can be safely recommended. Those, who aim at a perfect education, will not "canton out to themselves a little Goshen in the intellectual world," which is to receive all their labours, and leave the rest of the vast field of the mind to neglect. Mathematicians should make themselves acquainted with the principles of moral evidence, otherwise they fail in the conduct of life;—and it is not too much to say, that even literature, which is an elegant as well as lofty pursuit, is by no means incompatible with a suitable degree of devotedness to their chosen sciences.

The ablest mathematicians have in some instances been accomplished literary scholars. Among many others, Blaise Pascal can hardly fail to be remembered. He was capable of offering the most valuable contributions to the abstract sciences; and in his Provincial Letters and other writings of a less abstract character, has bequeathed to France and to the world the most honourable monuments of sensibility, of taste, and eloquence.

CHAPTER TWENTIETH.

MORAL REASONING.

§. 231. *Of the subjects and importance of moral reasoning.*

MORAL REASONING, which is the second great division or kind of reasoning, concerns opinions, actions, events &c.; embracing in general those subjects, which do not come within the province of demonstrative reasoning. The subjects, to which it relates, are often briefly expressed by saying, that they are *matters of fact*; nor would this definition, concise as it is, be likely to give an erroneous idea of them.—Skill in this kind of reasoning is of great use in

the formation of opinions concerning the duties, and the general conduct of life. Some may be apt to think, that those, who have been most practised in demonstrative reasoning, can find no difficulty in adapting their intellectual habits to matters of mere probability. This opinion is not altogether well founded, as we have seen in the preceding chapter. Although that species of reasoning has a favourable result in giving persons a command over the attention, and in some other respects, whenever exclusively employed it has the effect in some degree to disqualify them for a correct judgment on those various subjects, which properly belong to moral reasoning.—This last, therefore, which has its distinctive name from the primary signification of the Latin *MORES*, viz. *manners, customs, &c.*, requires a separate consideration.

§. 232. *Of the nature of moral certainty.*

Moral reasoning causes in us different degrees of assent, and in this respect differs from demonstrative. In demonstration there is an intuitive perception of the relation of the propositions compared together; and a knowledge or absolute certainty of their agreement or disagreement.—In moral reasoning this agreement or disagreement is only *presumed*, but this presumption may be more or less, admitting a great variety of degrees. While, therefore, one mode of reasoning is attended with knowledge; the other can properly be said to produce only judgment or opinion.—But the probability of such judgment or opinion may arise so high, as to exclude all reasonable doubt. And hence we often speak, as if we possessed certainty in respect to subjects, which admit merely of the application of moral reasoning. Although there is undoubtedly some difference between the belief attendant on demonstration, and that produced by the highest probability, the effect on our feelings is very nearly the same. A man, who should doubt the existence of the cities of London and Pekin, although he has no other evidence of it than that of testimony, would be considered hardly less singular and unreasonable, than one, who might

take it into his head to doubt of the truth of the propositions of Euclid.—It is this very high degree of probability, which we term *moral certainty*.

§. 233. *Of reasoning from analogy.*

MORAL REASONING admits of some subordinate divisions; and of these, the first to be mentioned, is reasoning from *analogy*.—The word, analogy, is used with some vagueness, but in general denotes a resemblance, either greater or less.—Having observed a consistency and uniformity in the operations of the physical world, we are naturally led to presume, that things of the same nature will be affected in the same way, and will produce the same effects; and also that the same or similar effects are to be attributed to like causes.—ANALOGICAL REASONING, therefore, is that mental process, by which unknown truths or conclusions are inferred from the resemblances of things.

The argument, by which Sir Isaac Newton establishes the truth of universal gravitation, is of this sort. He proves, that the planets in their revolutions are deflected towards the sun in a manner precisely similar to the deflection of the earth towards the same luminary; and also that there is a similar deflection of the moon towards the earth, and of a body projected obliquely at the earth's surface towards the earth's centre. Hence he infers by analogy, that all these deflections originate from the same cause, or are governed by one and the same law, viz. *the power of gravitation*.

This method of reasoning is applicable to the inquiry, Whether the planets are inhabited?—and furnishes the sole ground for the indulgence of such a supposition. We observe a resemblance in certain respects between Mars, Jupiter, Saturn, and other planets, and the earth. They all revolve around the sun, as the earth does, and all derive light from that source. Several of them are ascertained to revolve on their axis, and, consequently, must have a succession of day and night. Some of them have moons, and all are subject to the law of gravitation. From these

various similitudes we draw the conclusion by analogy, that those planets must be inhabited, like the earth.

There are a variety of subjects, both speculative and practical, in respect to which we may reason in this way ; and sometimes with considerable satisfaction. And among others, this method of reasoning finds a place in the arguments of persons in the practice of the law. An attorney, for instance, advocates a case, which does not fall within the provisions of existing statutes, and for which he finds in his authorities no exact precedent. He is, therefore, under the necessity of ascertaining, as far as possible, the analogy or resemblance between this case, and others, which are given, and have been decided upon. And he has here a favourable opportunity for the exhibition of his research and discrimination.—A considerable part of the argumentation among pleaders at the bar is employed in urging various analogies of this sort. It is the business of the court in such instances to adjust, and compare them together, and allow them their due weight. In doing this, their discernment and integrity are called into exercise ; for sometimes a small circumstance, and perhaps one, which the pleader has laboured to involve in obscurity, will disclose an essential distinction between the case in hand, and that on the file of precedents, to which it has been likened.

§. 234. *Caution to be used in reasoning from analogy.*

The last remark leads us to observe, that much care is necessary in arguments drawn from this source, especially in scientifick investigations ; and they are in all cases to be received with some degree of distrust. The ancient anatomists are an instance of precipitate reasoning from analogy. Being hindered by certain superstitions from dissecting the bodies of men, they endeavoured to obtain the information they wanted, by the dissection of those animals, whose internal structure was supposed to come nearest to that of the human body. In this way they were led into a variety of mistakes, which have been detected by later anatomists. It does not follow, because

things resemble each other in a number of particulars, that this resemblance will be found in all others; and we are, therefore, always to consider ourselves in danger of pushing the supposition of similitude too far.

The proper use of analogical reasoning seems to be, in all scientific inquiries, to illustrate and confirm truths, which are susceptible of proof from other sources of evidence. A happy instance of this use of it is the work of Bishop Butler, entitled, "*The Analogy of Religion, natural and revealed, to the constitution and course of nature.*"—It is not the object of the writer to prove the truth of religion, either natural or revealed, but to answer some objections, which may be brought against its principles. And this he does by proving, that the same objections exist to the providence of God in the natural world. There is an analogy or resemblance in the two; and if the objections, which are brought, will reject him from the authorship of what we term religion, they will dethrone him also from all direction in the ordinary economy of nature.

§. 235. *Of reasoning by induction.*

We come now to another method of moral reasoning, viz. by induction.—*Inductive reasoning* is the inferring of general truths from particular facts, that have fallen under our observation.—Our experience teaches us, that nature is governed by uniform laws; and we have a firm expectation, (whether it be an original principle of our constitution or whatever may be the origin of it,) that events will happen in future, as we have seen them to happen in times past. With this state of mind we are prepared to deduce inferences by induction.

When a property has been found in a number of subjects of the same kind, and nothing of a contradictory nature appears, we have the strongest expectation of finding the same property in all the individuals of the same class; in other words, we come to the conclusion, that the property is a general one. Accordingly, we apply a magnet to several pieces of iron; we find in every instance a strong

attraction taking place; and we conclude, although we have made the experiment with only a small number of the masses of iron actually in existence, that it is a property of iron to be thus affected by that substance, or that all iron is susceptible of magnetical attraction. This is a conclusion drawn by induction.—Although the belief attending it is not precisely of the same nature with the belief accompanying demonstration, it is moral probability of the highest kind, or what is sometimes termed moral certainty; and is at least found to be sufficient for all practical purposes. We obtain all the general truths, relating to the properties and laws of material objects, in this way.

And we thus not only acquire a knowledge of the general nature of material objects, but apply the same inductive process also in the investigation of laws, which govern the operations of the mind. It is by experience or observing what takes place in a number of individuals, that we are able to infer the general law of association, viz. When two or more ideas have existed in the mind in immediate succession, they are afterwards found to be mutually suggested by each other. It is the same in ascertaining other general laws.

The method of induction, which is recommended by Lord Bacon, as one of the most important aids in the search after truth, is employed not only in ascertaining the general facts both of physical and intellectual nature, but is employed also in the formation of such practical rules and maxims, as are of use in the common concerns of life.

§. 236. *Of the caution necessary in inductive processes.*

Reasoning in this method requires the exercise of caution, no less than by analogy. It is especially liable to prove fallacious, whenever our investigations have been marked with impatience, and our judgments are formed on a very small number of facts.—When the number of examined instances is large, and the results are uniform, the conclusion amounts to moral certainty. But

when the number of such instances is small, and the results are not altogether uniform, the judgments formed will possess a greater or less degree of probability, varying with circumstances.

§. 237. *Of the evidence of testimony.*

Before entering directly on the subject of the evidence of testimony, we shall dwell a moment on the remark in a previous section, that, among the most considerable sources of knowledge, are the SENSES, INTUITION, and REASONING.—A large portion of our knowledge, which we considered to be the same with what is otherwise termed TRUTH, is derived from the senses;—and this is what is meant in general, when it is said, that we have a knowledge of this or the other thing, by our personal observation.—A second source of knowledge is intuition. Whatever perceptions we have, which are intuitive, have an equally strong claim to be reckoned as knowledge or truth with those, which can be traced to the senses.—Further; all reasoning, as far as it is demonstrative, is a source of knowledge; we have no more doubt of the truth of the conclusions, drawn from such reasoning, than we have of the separate intuitive perceptions, which preceded it. And also the deductions of moral reasoning may, with good grounds, be considered as coming within the limits of what men commonly dignify with the title of knowledge, when attended with a probability of the highest kind; that is, whatever is morally certain. To other conclusions, deduced by moral reasoning, we ordinarily give the name of JUDGMENTS or OPINIONS.

But something remains to be said on the nature of the EVIDENCE, involved in these sources of knowledge. Of evidence itself it is perhaps sufficient to say, by way of defining it, that it is a circumstance, which is naturally fitted to affect our belief. And then with this idea of it in view, we say, that the evidence of the senses, which were mentioned as the first source of all truth, is something inseparable from that part of our constitution, is ultimate,

can be resolved into nothing more simple or certain, and stands in no need of explanation. Our Creator himself, in as much as he has made us thus, seems to have offered his responsibility, that they will not fail to guide us into certainty, so far at least as is necessary for us.—The evidence of intuition is certainly not less strong, resulting from the constitution of the mind, as much as the other does from that of the body, and demonstrative certainty is in effect the same as that of intuition; that is, the evidence, on which the conclusions in demonstrations are founded, is not less decisive.

But when we come to moral reasoning, we meet with a species of evidence of a different kind; and yet of so frequent recurrence and of so great importance, as to merit some particular consideration. We refer to the evidence of testimony.

TESTIMONY is the report of men concerning those things, which have fallen under the observation of their senses. Testimony is admitted as evidence; that is, it is a circumstance, which is naturally calculated and fitted to influence our belief.—As to the fact, that we readily receive the testimony of our fellow beings as evidence, it is undeniable. Without such confidence in what they assert, every one's knowledge of events and facts would be limited to those only, of which he himself had been a personal witness. In this case, no American, who has not been a traveller, can believe, that there is such a city as London; and no Englishman can believe, that there is such a city as Rome; and no person whatever has any ground for believing, that such men as Hannibal and Cæsar have ever existed.—But then it is to be remembered, that there is no natural connection between words and things, between the testimony, which is given, and the thing concerning which it is given. This being the case, it has often been asked, Upon what principle do we give credit to human testimony?—And the question certainly has a direct connection with the philosophy of the human mind, and deserves consideration.

§. 238. *Grounds of belief in testimony.*

Mr. Hume maintains, that our confidence in testimony is derived from no other principle, than our observation of the veracity of men, and of the usual conformity of facts to the reports of witnesses. In other words, he makes *experience* the foundation of our confidence or belief in testimony.

But there is a serious objection to this explanation, which is thought by many quite to overthrow his view of the subject. The objection is this,—Children, who have had but very little experience, give their assent to testimony, and the strength of their assent or belief will be the greater, the less removed they are from infancy. The credulity of children has almost passed into a proverb; youth surrenders its belief almost as readily; but manhood, which has seen more of the operation of the human passions, becomes cautious; and often the caution of manhood degenerates in old age into a suspicion and distrust of the worst kind.—What then becomes of the doctrine of Mr. Hume, that confidence in testimony is the result of experience? One would think, if this be the course which things take, that the opposite of his statement is nearer the truth.

§. 239. *Confidence in testimony founded in an original tendency of our constitution.*

We must, therefore, adopt some other explanation; and we cannot but think, there is good reason for supposing, that confidence in testimony has its foundation in an original tendency of our minds. Certainly the wise Author of our nature intended, men should live together in society. Consequently, he would give to them those mental tendencies, which are suitable and necessary in such a situation; such, for instance, as a disposition to speak the truth. And accordingly we find, that men are disposed to speak the truth, to convey, in their intercourse with others, their real sentiments. The telling of falsehoods is undoubtedly a

violence to our natures, and the greatest liars tell the truth an hundred times, where they utter a falsehood once. —But it is no harder to believe, that we naturally credit testimony, or have a natural tendency of that sort, than that we naturally speak the truth. And we imagine, there is as much evidence of the former, as of the latter. Indeed the latter tendency, or a disposition to speak truth, seems to require just such a counterpart in our constitution as the former, and without the one, the other would lose no small share of its fitness and worth. For surely a natural tendency to speak the truth would be very near superfluous, if there were not in our nature something corresponding, which would lead us to yield, to what we hear, a ready and confiding assent. —In answer, therefore, to the inquiry, What is the foundation of our belief in testimony, —we reply in short, that we are naturally led, or are led by the principles of our mental constitution, both to speak the truth, and to yield a ready assent to what we hear spoken, or to testimony.

Furthermore, this original tendency to believe in testimony is weakened in most cases, as we have great reason to think, the further we advance in life. At first we yield our assent without any hesitation; to doubt is unnatural, and when we are compelled to do it, it is no small trial to our feelings. But no one lives long and mingles much with men, without being deceived many times. We learn by degrees the wide influence of interested motives; and so far from falling in with Mr. Hume's hypothesis, we have greater reason for saying, that experience leads us to distrust, where nature would prompt us to believe.

§. 240. *Of the operation of the principles of association in reasoning.*

Before leaving the subject of reasoning, it is proper to remark on the influence of the principles of association on any process of this nature. Proposition follows proposition with so much regularity, that we are apt to imagine, the whole is perfectly arbitrary. This supposition is quite

far from the truth. It is true, when a number of ideas are presented nearly at the same time, the mind puts forth a volition, or exercises choice, in selecting one idea in preference to another. But the ideas, from which the choice is made, and without the presence of which, it could not be made, are not caused by volition, and, therefore, mere arbitrary creations; but are suggested by the laws of association.

As an illustration we will suppose an argument on the justice and expediency of capital punishments in ordinary cases. The disputant first denies in general terms the right, which social combinations have assumed of capitally punishing offences of a slight nature. But before considering the cases he has particularly in view, he remarks on the right of capital punishment for murder; and admits, that the principle of self defence gives such a right. He then takes up the case of stealing, and contends, that we have no right to punish the thief with death, because no such right is given by the laws of nature; for, before the formation of the civil compact, the institution of property was not known. He then considers the nature of civil society, and contends, that, in the formation of the social compact, no such extraordinary power, as that of putting to death for stealing or other crimes of similar aggravation, could have been implied in that compact, because it never was possessed by those, who formed it; &c.

Here is an argument made up of a number of propositions, and carried on, as may be supposed, to very considerable length. And in this argument, as in all others, every proposition is, in the first instance, suggested by the laws of association; it is not at all a matter of arbitrary volition. The disputant first states the inquiry in general terms; he then considers the particular case of murder; the crime of theft is next considered; and this is examined, first, in reference to natural law, and, afterwards, in reference to civil law.—And this consecution of propositions, takes place precisely the same, as when the sight of a stranger in the crowd suggests the image of an old friend, and the friend suggests the village of his residence, and

the village suggests an ancient ruin in its neighbourhood, and the ruin suggests heroes and battles of other days.—It is true, that other propositions may have been suggested at the same time, and the disputant may have had his choice between them, but this was all the direct power, which he possessed.

§. 241. *Grounds of the selection of propositions.*

A number of propositions are presented to the mind by the principles of association ; the person, who carries on the process of reasoning, makes his selection among them. But it is reasonable to inquire, how it happens, that there is such a suitableness in propositions, as they follow each other?—And this seems to be no other than to inquire into the circumstances, under which the choice of them is made, or the grounds of the selection.

Let it be considered, then, that in all arguments there is some general subject, on which the evidence is made to bear ; there is some point in particular to be examined. In reference to these general outlines, we have a prevailing and permanent desire. This desire is not only a great help in giving quickness and strength to the laws of association ; but exercises also a very considerable indirect influence in giving an appropriate character to the thoughts, which are suggested by those laws. Hence the great body of the propositions, which are at such times brought up, will be found to have a greater or less reference to the general subject. These are all very rapidly compared by the mind with those outlines, in regard to which its feelings of desire are exercised, or with what we usually term *the point to be proved*.—Here the mind, in the exercise of that susceptibility of feelings of relation, which we have already seen it to possess, immediately discovers the suitableness or want of suitableness, the agreement or want of agreement of the propositions presented to it, to the general subject. This perception of suitableness, which is one of those relative feelings, of which the mind is from its very nature

held to be susceptible, exists as an ultimate fact in our mental constitution. All, that can profitably be said in relation to it, is the mere statement of the fact, and of the circumstances, under which it is found to exist.—Those propositions, which are judged by the mind in the exercise of that capacity, which its Creator has given it, to be agreeable to the general subject or point to be proved, are permitted by it to enter in, as continuous parts of the argument. And in this way a series of propositions rises up, all having reference to one ultimate purpose, regular, appropriate, and in their issue laying the foundation of the different degrees of assent.—This explanation will apply not only to the supposed argument in the preceding section, but to all instances of moral reasoning, and also to demonstrative.

§. 242. *Of the limitation of power over arguments.*

From what has been said it very naturally follows, that our power in argumentation is limited, and that we can no more by mere volition secure the existence of new and conclusive points in any given process of reasoning, than we can by mere volition give creation in the first instance to our thoughts. Persons of the most gifted intellect are held in check, and are restrained by the ultimate principles of their mental constitution; these are boundaries, which they cannot pass; and those, who are capable of the greatest efforts in framing arguments, will be no less sensible of this truth, when they carefully examine the course of their thoughts, than others.

Hence we are led very readily to see in some measure what things enter into the mental possessions and discipline of a successful reasoner.

§. 243. *Of requisites in a skilful reasoner.*

(1) The skilful reasoner must be well informed.—No man can reason well on a subject, unless he has informed himself in regard to it. That many speak on subjects, which are proposed to them, without having made

any preparation, cannot be denied ; but there is a vast difference between noisy, incoherent declamation, and a well wrought argument, made up of suitable propositions, following each other with a direct and satisfactory reference to the conclusion. The mind passes from one point to another, connected with the argument, and in so doing is governed by the principles of association, as we have seen ; but what opportunity can there possibly be for the operation of these principles, when the mind is called to fasten itself upon a subject and to decide upon that subject without any knowledge of those circumstances, which may be directly involved in it, or of its relations, and tendencies ? Let the greatest orator attempt to speak with such slight information on the question to be debated, and he would appear to hardly greater credit, than a school-boy in his first essays.

(2) Much depends also on practice.—In the prosecution of an argument there is necessarily a mental perception of the congruity of its several parts, or of the agreement of the succeeding proposition with that, which went before. The degree of readiness in bringing together propositions and in putting forth such perceptions, will greatly depend on the degree of practice.

The effect of frequent practice, resulting in what is termed a *habit*, is often witnessed in those, who follow any mechanick calling ; where we find, that what was once done with difficulty comes in time to be performed with great ease and readiness. The muscles of such persons seem to move with a kind of instinctive facility and accuracy in the performance of those works, to which they have been for a long time addicted.

There is a similar effect of frequent practice in the increase of quickness and facility in our mental operations ; and certainly as much so in those, which are implied in reasoning, as in any others. If a person have never been in the practice of going through geometrical demonstrations, he finds his mind very slowly and with difficulty advancing from one step to another ; while, on the other

hand, a person, who has so often practised this species of argumentation, as to have formed a habit, advances forward from one part of the train of reasoning to another with great rapidity and delight.—And the result is the same in any process of moral reasoning.

§. 244. *Of moral reasoning as suited to our situation as accountable beings.*

Some remarks were made in the last section of the last chapter and in the first of this, tending to show the comparative value of demonstrative and moral reasoning. There is another point of some consequence, which has a connection with that subject, remaining to be mentioned here. It is this;—Moral reasoning, in as much as it does not *compel* our assent, but leaves the mind, in most cases, in some degree of doubt, is peculiarly suited to our condition as moral agents.

If all the common subjects of life admitted of demonstration, and all the conclusions, which we formed, were certain and irresistible, it would come near driving both vice and virtue out of the world. It would subject the voluntary powers to a constraint little short of mechanical; and have a direct tendency to confound characters and dispositions; neither demanding a contest with passion, nor the exercise of candour, nor desires to learn the will of God, and excluding, in a great measure, religious faith and other principles, which are now suited to our situation, and training us up for the day of final account.—While, therefore, the judgments, resulting from moral reasoning, will be allowed to be in general sufficient to guide us, wherever there is an honest and candid heart; they evidently present no insuperable barriers to the influence of pride, and passion, and self-interest, and prejudice. They hold out ample inducements to those, who love the truth, and are sincere; but those, who are not of this character, will no doubt pursue a different course, pervert evidence, and bring their conclusions to meet and fall in with their private views.—And thus by their own works they are

judged. So that moral reasoning is especially suited to beings, who are accountable for their passions, accountable for their perversions of the truth, and for all their conduct ; and this is a circumstance, in no small degree, to its honour.

CHAPTER TWENTY FIRST.

DIALECTICKS OR RULES OF DEBATE.

§. 245. *Of the need of directions in argumentative debate.*

However frivolous may have been the art of disputation, otherwise called in the language of the Schools **DIALECTICKS**, during the Scholastick ages, and for many years since in some learned seminaries, there is no doubt a **DIALECTICKS** more rational, more practical, and worthy of our consideration in this place. The circumstances of the times, which ought to have an influence in determining what is necessary in a course of education, forbid our laying aside this subject—the art of debating—as altogether out of place and useless. We allude in particular to the spirit of inquiry, which has gone abroad, to the deep examinations, which have made their way into the foundations of political science, and to the establishment of free governments. But as our efforts in all intellectual exercises are at first unstable and imperfect, and we are aided in them, and are kept from running into error by means of rules ; so shall we find the advantage of a few directions in those argumentative controversies, to which we give the name of debates. The subject very clearly belongs to that part of intellectual philosophy, which relates to mental discipline.

It will help in some measure to show the degree of importance which properly attaches itself to this subject, if we mention some of the occasions, on which the practice of debating occurs.—(1) There are debates in the common intercourse of life, in the management of ordinary af-

fairs, and in fireside conversations.—Although not attended with much formality, occasional controversies at such times are unavoidable, and are often a source both of improvement and of pleasure.—(2) Disputations or Forensic exercises are often appointed in academies, colleges, and other schools of learning. The object is, not only to set students upon thinking, and to help them in the discovery of truth; but still more to quicken the argumentative powers, and to afford them a suitable discipline. Sometimes a certain number are appointed on the affirmative and others on the negative; but in general it is best, where there is found to be a considerable share of enterprise in discussion, to let each one affirm or deny the question, as he chooses.—(3) The controversies at the bar are properly debates; they are often managed with much skill and considerable warmth. But the advocate in courts of judicature labours under the disadvantage of being obliged always to adhere to the interests of his client, whatever may be his own private opinions on the subject in discussion.—(4) Legislative assemblies, which in latter times have so rapidly multiplied, afford good opportunities for the efforts of the honest dialectician. He has great motives, operating upon him, and calling him to put forth the noblest powers of argument. His obligations to his constituents, the honourable feelings of his own breast, the happiness of thousands, to say nothing of that accountability, which awaits all at last, all imperiously summon him to examine, to advance what he believes, and to maintain it.—(5) Subjects, proposed in literary and philosophical societies, written controversies of whatever kind, discussions in ecclesiastical councils, and on other occasions, are all so many opportunities of debate.—So that it is a very important accomplishment, especially in this age of the world, to be able to reason well on subjects proposed, and with proper views and feelings. And hence the propriety of laying down at least the few directions, which are to follow.

§. 246. *Of debating merely for the pleasure of it.*

It is not advisable to enter into debates merely for the pleasure of it, because, whenever this practice is once adopted, the person will often unavoidably set himself up as a disputant, both to his own discredit, and the annoyance of his associates. How many persons, by inordinately indulging in this propensity, become talkative, obstinate, and assuming, to a degree intolerable ! They oppose almost every thing they hear, and their heads are continually busied with finding out arguments for this purpose. And this tends to disturb the harmony and happiness of life ; and it is discountenanced also by those sentiments of mutual respect, which men owe to each other.

§. 247. *Of being governed by a desire of the truth.*

In all questions, which admit of discussion, and on which we find ourselves at variance with the opinions of others, we are to make truth our object. A desire of the truth is the first qualification in such inquiries. Neither acquirements, nor strength of natural talents can much avail us without a mind honest, and open to conviction.—The opposite of the desire of the truth is a wish to decide the subject of dispute in one way rather than another. The foundation of such a preference of one result to another are in general prejudice, interest, and passion ; and these are the great enemies of truth. Whenever we are under their influence, we form a different estimation of facts and of other sources of evidence from what we should do under other circumstances ; and at such times they can hardly fail to lead us to false results.

We have an illustration of the effects of a disputatious spirit, unconnected with any desire of the truth, among the Schoolmen. No persons seem to have been more skilled in the technical forms of argument. To dispute with readiness and skill was considered among them a part of education so valuable, that all possible pains were taken in securing this mental accomplishment. But the acquisition

of truth did not form any prominent part of their plan. The subjects, about which they debated, were frivolous; and the spirit, which animated them, utterly captious and disingenuous. The testimony of John of Salisbury, a learned man of the Scholastick ages, confirms this. He visited Paris in the year 1137, and attended upon the lectures of the famous Abelard and other masters, and made great advancements in learning. A number of years afterwards he returned to the place of his early studies, in order to confer with his former associates, who yet remained there, on the topicks, on which they had been used to converse. —“I found them (says he) the same men, and in the same place; nor had they advanced a single step towards resolving our ancient questions, nor added a single proposition, however small, to their stock of knowledge. Whence, I inferred, what indeed it was easy to collect, that dialectick studies, however useful they may be when connected with other branches of learning, are in themselves barren and useless.”

§. 248. *Consider the importance of the subject.*

It was the fault of the Schoolmen, not only that they too much cherished a disputatious spirit, but that they disputed upon subjects, which were in general of the most trivial kind. Mr. Locke mentions, that they actually thought themselves to have succeeded in proving, that black is white, and that white is black. And this may be received as a specimen of their exquisite inquiries, viz. Whether different colours, that is, different simple ideas, (a class of ideas forming a part of our knowledge the most clear and distinct,) be not the same colours, or the same ideas?—The example, which they set, in the selection of such subjects of debate, is to be avoided. Always debate on subjects of some importance. But the specification of what constitutes importance, is not easily done.—It may be said, however, that there are some subjects, which possess a general importance, viz. Such as concern the laws

of nature and the principles of the human constitution ; the rights of man, the duties of a citizen, the sources of prosperity in civil communities, &c ; in general all philosophical, moral, and political inquiries. There are a variety of other subjects, which are not of general importance, but are far from being of inconsiderable consequence to individuals, since they concern their particular profession or calling. Many subjects are of great moment to the physician or the merchant, which are of less importance to the farmer or mechanick. The importance of subjects, therefore, is to be measured in some degree by their bearing upon those stations and duties, to which Providence has assigned us. And however wanting they may be in general interest, no man is to be blamed for frequently discussing them, when he is convinced, that such discussions will conduce to greater skill in his appropriate calling, and, consequently, to increased success and usefulness.

§. 249. *Of competency to enter into the discussion.*

It is proper, before undertaking to discuss a question, to pause, and make some inquiries into our ability for it. Incompetency, or want of ability may be either owing to a deficiency, in some way, of mental power, or it may be owing to our not having taken proper pains to inform ourselves. Some may have too little talents ; and others, too limited an acquaintance with facts.—There is also another species of incompetency perhaps more frequent than either of these, viz. a too great personal interest in the decision. Nothing more disturbs the just exercise of reasoning, and causes perversion in our judgments, than this. And what renders the evil of it the greater, persons are often under influence from this source, without being themselves fully aware of it. Whenever any one has ground to believe, that he is under any degree of bias of this kind, he should be more careful in the examination of evidence, and exercise the greater caution in general.

§. 250. *Care to be taken in stating and understanding the question.*

Our desire of the truth and our adequacy for the discussion of the question will not excuse us from a degree of circumspection in the statement of the point in debate.

In the first place, the question is to be fairly stated.—No artifice here is to be allowed. The matter in controversy may be stated in such a way as to include in the very enunciation of it something taken for granted, which must necessarily lead to a decision in favour of one of the opponents. But this amounts to begging the question, a species of fallacy or sophism, upon which we shall again have occasion to remark.—Sometimes the subject of discussion is stated so carelessly, that the true point at issue is wholly left out. It may be proper, therefore, in many cases to adopt the practice of special pleaders, and first to ascertain all the points, in which the opponents agree, and those in which they differ. And then they can hardly fail of directing their arguments to what is truly the subject of contention.

In the second place, we should aim to have clear ideas of every thing stated in the question, which has an intimate connection with the point at issue. If the inquiry concern some fact, we are to endeavour clearly to understand its nature, and then we can better judge of the weight of the evidence, which is made to apply to it. If the statement affirm or deny any thing, in regard to the qualities or properties of material bodies, it is incumbent upon us to possess as clear ideas as possible, both of the object in general, and of those properties or qualities in particular. Similar remarks will apply to other subjects of inquiry of whatever kind.—As an illustration of these directions, we will suppose, that the point in dispute is, Whether civil government originates from the people? Here it is necessary to understand what is meant by the word, government; that is, whether it is meant to include in the term all the different kinds of government, such as monarchical aristocratical, republican, &c., and to give it the most gen-

eral meaning. The meaning of the word, originate, is also to be looked into. We are to know, whether the term, as here used, implies or admits the validity of a tacit agreement. In the inquiry, it will necessarily be admitted, that many governments exist without any written or express agreement; and still it may be urgently contended, that they have originated by virtue of a tacit agreement.

Again, the question is, Whether some political measure is constitutional, or unconstitutional? Here we are to obtain precise ideas of the measure in debate, and also inform ourselves of the terms or articles of the Constitution.—The taking of such precautions would often have prevented great waste of words, as well as undue indulgence of irritable feelings; and would have often led more directly to the discovery of truth.

§. 251. *Of simplicity of language in arguments.*

A brief remark here upon the dress or style, which is proper in arguments. Let the word be suited to the idea, and be common without being vulgar; and the construction of the sentences, as much as possible, without artifice. There is a sincerity, when the mind is earnestly bent upon the discovery of truth, which delights in plainness of speech. This direction is especially necessary, when the force of an argument is meant not for ourselves only, but for others also; and when perhaps many of those, to whom it is meant to apply, have not had the advantage of much education. Men of exalted minds have seen the propriety of the course here pointed out, and have followed it.—Martin Luther remarked, in defence of his plain and direct way, that he had an eye on the multitude; and another of his sayings, that logical power is the ability to teach, was an admirable commentary on the folly of the old Scholastick methods.

§. 252. *All trifling propositions to be avoided.*

Full of the subject, and bent, not so much upon putting down your opponent, as the discovery of truth, avoid all

trifling propositions. And such propositions are all those, which communicate no new information. Of trifling propositions the first class may be termed,

Identical propositions.——The proposition **WHATEVER is, is**, may be given as an instance. When examined, it will be found to teach us nothing; and although it was, in the times of the Scholastick philosophy, employed as an axiom, and thought to be of much consequence in helping along as a medium in argument, the proof, which it brings in any case whatever, amounts to no more than this, that the same word may with certainty be predicated of itself. When we say that man is man, or that blue is blue, we receive as much information and as valuable, as when we say, that whatever is, is; that is, we know no more afterwards than we did before the enunciation of the proposition. The same of all, which belong to this class.

There is a second class of trifling propositions, viz.

Those, in which a part only of the complex idea is predicated of the whole.

Hence to this class of propositions belong all those, where the genus is predicated of the species; when, for instance, it is said, that lead is a metal.

When a person frames a proposition, it is supposed, that both he and his opponent know the meaning of the terms of the proposition; and, accordingly, if they know the meaning of the term, lead, and what ideas are contained in it, it communicates no new information, either to the speaker or to others, when it is asserted, that lead is a metal.

Such propositions, as these, Man is rational, Gold is yellow or fusible, are of this kind.

When, on the contrary, we are told, that man has a notion of God, or that man is cast into a sleep by opium, we then learn something, since the ideas here expressed are not contained in the word, man.

A proposition, then, may be said to be instructive or to convey information, when something is affirmed, which is a necessary consequence of any complex idea, but is not contained in it, and not otherwise. Take the following illustration;—The external angle of all triangles is great-

or than either of the internal opposite angles. Here there is some information communicated, since the relation of the outward angle to either of the internal opposite angles, does not make a part of the complex idea conveyed by the word, triangle.

The second class of trifling propositions, when carefully examined into, will be found to be essentially the same with the first, although they have a little more the appearance of conveying knowledge.

In argument, when a word is employed with looseness and inconsistency, it is rightly considered to be a proper subject of criticism, and may be fairly objected to; and the same liberty, and for the same reasons, may properly be taken with those propositions, which are called trifling; which have the appearance of carrying us onward in the investigation of a subject, but which, when truly estimated, leave us no wiser, than before we heard them.

§. 253. *Judgments to be formed on evidence, not on effects.*

Persons, engaged in debate, should aim at the truth in a fair and direct way; and in doing this, they will find it important to regard another rule, viz. To be guided by evidence, rather than by consequences. We often imagine it highly desirable, that the question should be found to terminate in one way, rather than in another. We ought ever to form an opinion according to the preponderance of evidence, whatever effects may be connected with the formation of such opinions.—This rule is of considerable consequence, when questions are agitated among persons, belonging to different political or religious parties. If either of the disputants admits the sentiments of his opponent, he commits and injures those interests, which he has warmly espoused; and this he is very unwilling to do. Especially is this unwillingness manifest, when a person is called upon to decide on facts, which involve the character of a friend.—Whenever we are thus influenced, it is manifest, that truth is not the main object, and that we are ready to sacrifice it to personal interest and pre-

conceived views.—But, while our judgments should be formed wholly on the evidence, and not on the anticipated results, a consideration of consequences may have an important influence of this kind, viz. in making us more scrupulous and laborious in the examination of the subject before us.

§. 254. *Different sources of evidence on different questions.*

One subject admits of the application of one species of evidence ; another subject admits of evidence of a different kind. And the point under discussion should be looked at in this point of view,—in order to discover what species of evidence it admits.—In demonstrations we have the evidence of intuition, and the conclusions are certain. In the examination of the properties of material bodies, we have the evidence of the senses. In judging of those facts in the conduct of men, which have not come under our own observation, we must depend on testimony. Some subjects admit only of the evidence of tradition, and in respect to others we have no other aid than analogy. And in others again the evidence is wholly made up of circumstances.

The evidence, which exists in demonstrations, produces certainty ; that of the senses is the same, as far as it goes. The evidence of testimony causes probability in a greater or less degree, as the testimony is from one or more, given by a person, who understands the subject, to which it relates, or not, &c. Tradition, analogy, combinations of mere circumstances have their weight, sometimes strongly influencing our judgments, and at others, only in a small degree.

Different kinds of evidence may be brought to bear upon the same subject, and if so, all are to have their due weight. Other subjects admit of only one ; but should not fail of being examined on that account. In some cases, admitting of the evidence of circumstances merely, we may arrive at a high degree of probability.

§. 255. *Sources of false judgments or sophisms.*

There is a species of false reasoning, which we call a **SOPHISM**. A sophism is an argument, which contains some secret fallacy, under the general appearance of correctness.

(1) **IGNORATIO ELENCHI**, or misapprehension of the question, is one instance of the sophism. It exists, when the arguments advanced do not truly apply to the point in debate. Let it be supposed, that some person has founded a literary institution. The question is, Whether he be a man of learning, a scholar? It is argued, that he is, in consequence of having founded a seminary for scientifick purposes. Here we may deny the connection between the premises and the conclusion, although the argument is somewhat specious; because we know it to be the fact, that many men of but small information have been the patrons of science. That is, an argument is applied, which, it is supposed, would not have been brought forward, if there had been a proper understanding of the import and spirit of the question, and of what was justly applicable to it.

(2) **PETITIO PRINCIPII**, or begging of the question, is another instance of sophism. This sophism is found, whenever the disputant offers, in proof of a proposition, the proposition itself in other words. The following has been given as an instance of this fallacy in reasoning;—A person attempts to prove, that God is eternal, by asserting, that his existence is without beginning and without end. Here the proof, which is offered, and the proposition itself, which is to be proved, is essentially the same.—When we are told, that opium causes sleep, because it has a soporifick quality, or that grass grows by means of its vegetative power, the same thing is repeated in other terms.—This fallacy is very frequently practised; and a little care in detecting it would spoil many a fine saying, and deface many an elaborate argument.—What is called *arguing in a circle* is a species of sophism very nearly related to the above. It consists in making two propositions reciprocally prove each other.

(3) **NON CAUSA PRO CAUSA**, or the assignation of a false

cause.—People are unwilling to be thought ignorant; rather than be thought so, they will impose on the credulity of their fellow men, and sometimes on themselves, by assigning false causes of events. Nothing is more common, than this sophism among illiterate people; pride is not diminished by deficiency of learning, and such people, therefore, must gratify it by assigning such causes of events as they find nearest at hand.—Hence, when the appearance of a comet is followed by a famine or a war, they are disposed to consider it as the cause of those calamities. If a person have committed some flagrant crime, and shortly after suffer some heavy distress, it is no uncommon thing to hear the former assigned, as the direct and the sole cause of the latter.

(4) Another species of sophistry is called *FALLACIA ACCIDENTIS*.—We fall into this kind of false reasoning, whenever we give an opinion concerning the general nature of a thing from some accidental circumstance. Thus, the Christian religion has been made the pretext for persecutions, and has in consequence been the source of much suffering; but it is a sophism to conclude, that it is on the whole, not a great good to the human race, because it has been attended with this perversion. Again, if a medicine have operated in a particular case unfavourably, or, in another case, have operated very favourably, the universal rejection or reception of it, in consequence of the favourable or unfavourable result in a particular instance, would be a hasty and fallacious induction of essentially the same sort. That is, the general nature of the thing is estimated from a circumstance, which may be wholly accidental.

§. 256. *Of adherence to our opinions.*

Whenever the rules laid down have been followed, and judgments or opinions have been formed on a careful and candid examination of the evidence presented, those opinions are to be asserted and maintained with a due degree of confidence. Not that a person is to set himself up for infallible, and to suppose, that new accessions of evidence

are impossible, or that it is an impossibility for him to have new views of the evidence already examined. But a suitable degree of stability is necessary in order to be respected and useful; and, in the case supposed, such stability can be exhibited without incurring the charge, which is sometimes thrown out, of doggedness and intolerance.

It is further to be observed, that we are not always to relinquish judgments, which have been formed in the way pointed out, when objections are afterwards raised, which we cannot immediately answer.—The person thus attacked, can, with good reason, argue in this way;—I have once examined the subject carefully and candidly; the evidence, both in its particulars and in its multitude of bearings, has had its weight; many minute and evanescent circumstances were taken into view by the mind, which have now vanished from my recollection; I, therefore, do not feel at liberty to alter an opinion thus formed, in consequence of an objection now brought up, which I am unable to answer; but choose to adhere to my present judgment, until the whole subject, including this objection, can be re-examined.

This reasoning would in most cases be correct, and would be entirely consistent with that love of truth and openness to conviction, which ought ever to be maintained,

§. 257. *Influence of the practice of debating on the mind.*

The art of debating, when pursued on proper principles, is undoubtedly one of the noblest of arts. The able dialectician, who is known to refuse the application of his ability to any other, than what he deems good purposes, has greater influence, than he, who commands armies. Such men necessarily become leaders in the rising family of republics, that is spreading over the face of the earth.—But this art is not without its disadvantageous results, against which it is necessary, that the student should be in some measure guarded. The results of dialecticks in the case of the Schoolmen have been already alluded to; and they have not always been of the most favourable na-

ture, when the art has been practised with better views and under better regulations. Whenever a person has been occupied a great portion of his life in debates in courts of justice, or in legislative assemblies, or has from some causes been much involved in polemical controversies, which have called forth all his powers, it has frequently proved to be the case, that a character somewhat peculiar has been given to his mental operations.—To such persons we may give the name of professed debaters; meaning by the phrase those, who either from choice or the pressure of circumstances, have been so much occupied in debating, as to prevent a suitable degree of attention to other parts of intellectual culture. The unfavourable results, to which we allude, are these.

(1) *The professed debater is not likely to take a broad view of a subject.*—Such has been his mental discipline, that he too readily attaches himself to one side of an inquiry, and proposes to defend it, without having sufficient reasons for so doing. There are many things, which can neither be positively affirmed nor denied; cases, where the true statement is neither in the affirmative nor the negative, as the question stands proposed; but probably somewhere between them. A person is said to take a broad view of a subject, who examines it in all its parts, weighs evidence with care, and settles upon that opinion of it, whether affirmative, negative, or somewhere intermediate, which such careful examination of the evidence seems to him to warrant.

(2) *The professed debater is inordinately tenacious of his opinions.*—The subject of an adherence to our opinions has been already in some measure explained. Such adherence was not considered blameworthy, except when carried so far, as to be inconsistent with a preference of the truth and a proper openness to conviction. But those persons, whom we have now in view, seize with a strong and masculine hold on such points, as are favourable to the side of any question, which they may have espoused. They have fallen into the habit of asserting their arguments with no small degree of confidence; and are ready to believe

their own assertions, made in the ardour of feeling, which, under other circumstances, they would probably have doubted.—Having, therefore, been accustomed to defend their opinions, for so long a time, with much power of argument, and especially under the influence of excited feeling, in consequence of which they have often imposed upon themselves, their minds have gradually acquired a tenacity, which cannot but appear ungenerous and repulsive to men of candour.

Furthermore,—it has sometimes been remarked that professed debaters, who have been distinguished for their success in controversy, have at last become sceptical, wavering, full of uncertainty.—They have so often disproved and put to flight the opinions, advanced by others, that they have become suspicious, that truth is to be found nowhere. This characteristic, which is not unaccountable, although quite different from the result just stated, may be illustrated by the influence, which his success in polemical controversies is said to have had on the mind of Chillingworth. The contemporaries of Chillingworth have borne the most honourable testimony to his native candour. He was at first undoubtedly desirous of learning the truth; and without any undue inclination to scepticism, ready to give to evidence of whatever kind its due weight. The consequences, to which the training up of his vast powers to the sole art of disputation finally led, are stated by Lord Clarendon.—“Mr. Chillingworth had spent all his younger time in disputations and had arrived at so great a mastery, that he was inferior to no man in those skirmishes; but he had, with his notable perfection in this exercise, contracted such an irresolution and habit of doubting, that by degrees he grew confident of nothing.”—“Neither the books of his adversaries nor any of their persons, though he was acquainted with the best of both, had ever made great impression on him. All his doubts grew out of himself, when he assisted his scruples with all the strength of his own reason; and was then too hard for himself. But finding as little quiet and repose in those victories, he quickly recovered by a new appeal to his own judgment;

so that, in truth, he was in all his sallies and retreats his own convert."

§. 258. *Influence of the study of the Law.*

These remarks may prove an useful hint to those youth, who are entering upon the study of the Law. Mr. Burke has said of this study, that it quickens and invigorates the mind more than all the other kinds of learning put together, but he is also of opinion, that it is not apt, except in persons very happily born, to open and to liberalize it, exactly in the same proportion. The observations, which have already been made on the tendency of the practice of disputation when carried to an extreme, go to confirm these remarks of Mr. Burke. There is this further remaining to be said, concerning the practice of the law, that the members of this profession are constantly under the necessity of referring to the provisions of the national constitution, to legislative enactments, and to court decisions. Hence their powers, however great, are fettered. They are compelled by the circumstances, under which they act, to show how the cause now under trial agrees or disagrees with principles already established, and with cases already decided upon. They are to measure the rectitude or want of rectitude in things by the standards already in existence, without having that liberty, which would be highly agreeable to minds of a philosophick turn, to institute inquiries into right and wrong in the abstract.

And what is another circumstance quite unfavourable to the exercise of a free and philosophick spirit, they are apt to make references to legal decisions, legislative acts, &c. under the influence of that bias, to which they are exposed in consequence of their zeal in behalf of the respective litigants, whose cause they may have espoused.

If it be asked then, how happens it, that there are so many men in the practice of the law, who not only possess the power of making refined and acute distinctions, together with wit and invention, but also in addition to these requisites of the Forum, are candid and liberal, and are capable, as any men whatever, of forming a discreet judg-

ment on any complicated concern; the natural reply is, that such men, aware of the tendency of their professional contests, have guarded against it; and, in the true spirit of an enlightened wisdom, have made a successful effort to keep the mind free, liberal, and well balanced against the contracting influence of their calling.

§. 259. *Reasoners not always able to express themselves.*

From these views in respect to the members of the legal profession and disputants in general, we naturally pass to the consideration of a class of persons, who are unable to hold an argument in words, but are regarded as men of good judgment, and, as will appear, are reasoners.

How does it happen, that persons possessing the most just and efficient understandings are incapable of stating the grounds of their decisions to others?—wise, prompt and consistent in their actions, but in their public discourses obscure and perplexed?

The English Protector, Oliver Cromwell was a person of this description. (See §. 184.)—‘All accounts, says Mr. Hume, agree in ascribing to Cromwell a tiresome, dark, unintelligible elocution, even when he had no intention to disguise his meaning; yet no man’s actions were ever in such a variety of difficult cases, more decisive and judicious.’

Many of the most respectable and valuable men in our legislative assemblies are persons, who are rarely heard in debate. While they are known to possess reach of thought and correctness of judgment, they exhibit in public discussion little more than confusion and apparent inability.—Mr. Jefferson, author of the Declaration of American independence, is declared by one of his illustrious associates, who knew him well, to have been a silent member of the Continental Congress. And yet he had at that period the reputation of literature and science, and of being a happy writer; and lent great aid by his promptness and decision on committees. Instances of this sort are not unfrequent.

In cases of this description, there is,—(1) Great rapidity of thought.—The mind has been trained to rapid

views of subjects in all their bearings. The inability to speak in public does not arise from incompetency in the examination of those minute circumstances, which enter into our judgments of difficult cases. On the contrary, these persons are found to give opinions, which may be received with confidence, with more promptness, than very many others.

(2) There is, however, in such men, an inability to stop and analyze the current of thought.—They form their opinions with readiness and correctness, but when required to state the grounds of them, they are much at a stand; they fail in imparting to others the various circumstances, which led to their own convictions. Many of those finer and more intricate suggestions, which had an influence on their conclusions, can no longer be retraced by the memory. So that their argument, when stated in words, is but a series of propositions, poorly weighed and connected, mere “MEMBRA DISJECTA,” compared with the more admirable texture of their mental logick.

These remarks, we have already seen, are peculiarly applicable to men in active life, who are almost constantly beset with the calls of business. They are necessarily from their situation rather men of actions, than of words; called upon in many cases to decide suddenly, and not in general having leisure to form the habit of expressing themselves with effect and clearness to others. But their judgments are entitled to respect, resembling, as has been remarked by Dugald Stewart, the professional tact, with which the medical practitioner estimates the symptoms of a disease, or the intelligent eye-glance of the military engineer.—An English officer, a friend of Lord Mansfield, was appointed to the government of Jamaica. He expressed some doubts of his competency to preside in the court of chancery. Mansfield assured him, that he would not find the difficulty so great, as he imagined.—“Trust,” said he, to your own good sense in forming your opinions, but beware of attempting to state the grounds of your judgments. The judgments will probably be right; the argument will infallibly be wrong.”

§. 260. *People may reason wrong but judge right.*

It appears, then, that people may sometimes be wrong in their argument, but correct in their conclusion. We would not have these expressions misunderstood. All, that is intended, is, that an opinion may be given, which shall be correct, being founded on that silent, intellectual process, which has been mentioned, while an attempt at a verbal statement of the argument would prove an evident failure. In other words, the argument stated in language and the argument, as it exists in the mind, are not coincident; there being chasms and inconsistencies in the former, which did not exist in the latter.

This enables us to throw some light on a mental peculiarity in old people. Those, who are advanced in years and in the declination of their mental powers, very seldom enter into an argument. Still we regard them with reverence, and receive their sententious sayings, as a species of oracles. The opinion seems to have gained almost as wide a reception in these days, as in the time of Job;—“*With the ancient is wisdom, and in length of days is understanding.*” Old men by a sort of necessity have formed that kind of intuitive tact, which we see in men much involved in the business of active life. Owing to weakness of memory and a difficulty in fixing their attention, they find themselves unable to give a verbal statement of a considerable number of consecutive propositions, either satisfactory to themselves, or to others. Their reasonings, therefore, are merely mental processes, leading them in general to conclusions, sufficiently just;—the conclusions only, and not the propositions leading to them being communicated to others.—We see here an explanation, why old people are so fond of an aphoristical method, or rather why they express themselves so seldom in any other way, than by short sayings.

§. 261. *Process of the mind in voting on Legislative and other subjects.*

A proposition in some national legislature, perhaps whether the independence of some new formed republic

shall be acknowledged, is to be discussed. The votes are taken and a majority of them are in favour of the acknowledgment of independence in the case proposed. Under this general question, the acknowledgment of independence, it is easy to see, that there must be many subordinate propositions, having a connection more or less remote with the general question.

The question we suppose to have been decided in the affirmative. Condorcet has expressed an opinion of this kind, that, if the vote were taken on every subordinate proposition, the decision might be directly the reverse, in the *negative*, instead of the affirmative. But this intimation of Condorcet, there is reason to believe, in view of the remarks, which have been made, is incorrect.

In voting on the general question, every member thus voting virtually gives his opinion also on every subordinate inquiry. There are perhaps five, eight, or ten minor subjects, which it is important for him to examine; he *has* examined them, and has in his own mind made up an opinion on them. And the last opinion, the opinion on the general question, may properly be considered the comparison, combination, and the result of all the subordinate or minor decisions.

This is sometimes a very rapid mental process, so much so in some cases, as not to be remembered by the voter himself. But, if he be an honest man and desirous to give a judgment, which his own conscience would approve, something of this kind must have taken place.

§. 262. *Notices of treatises on reasoning.*

There are a few works in English, some of which will here be mentioned, which may give some further instruction on the subject of this, and of the two preceding chapters.

Locke's Conduct of the Understanding.—The object of this work is practical; it is of less extent, as well of less value, than his *Essay*. But it has a number of original and important remarks on demonstrative and other forms of reasoning, on fallacies or sophisms, on the influence of prac-

tice, on difference of natural talents, &c. The book exhibits the characteristick excellencies and defects of the writer; great originality, but want of method, and too much of irrelevant discussion and of repetition for the economical habits of this busy age.

Watts' Improvement of the Mind.—Dr. Johnson remarked in regard to this book, that he had perused it with great pleasure, and further observed, that instructors might be charged with deficiency in their duty, if they did not recommend it. No doubt the warm commendations of Dr. Johnson are in the main correct; but it seems necessary to observe, that the writer has advanced some views on the philosophy of the mind, which at the present day are regarded as quite inadmissible. For instance, we find the notion, which was once prevalent, that ideas are pictures or images, that in memory these pictures are inscribed upon the brain, much the same as the impression of the seal is left upon the wax, and that the greater or less degree of readiness in memory will depend on the greater or less degree of rigidity in the cerebral fibres.

Gambier's Introduction to the Study of Moral Evidence.—This valuable treatise contains many useful directions relating to moral reasoning, and examines particularly the subject of evidence;—it cannot fail to be interesting and instructive to the student.

The Study and Practice of the Law considered in their various relations to Society.—This work, written in a series of letters, is ascribed to Sir James Mackintosh. The letters are addressed to the young and rising mind, without professing to add greatly to the stores of science. They remark on the duties in general, one owes to society, and is bound to perform; suggest motives to great effort; show the distinction between the philosophy and the forms of law; with a variety of observations on method in business, on court pleadings, eloquence, imagination, &c. The work contains the suggestions of a philosophick mind, and is enlivened by eloquent passages.

CHAPTER TWENTY SECOND.

OF MEMORY.

§. 263. *Explanation of the faculty of memory.*

MEMORY is that power or susceptibility of the mind, from which arise those conceptions, which are modified by the relation of past time. It is not a simple, but complex state of the intellectual principle, implying, (1) a conception of the object, (2) the relation of priority in its existence. That is, we not only have a conception of the object, but this conception is attended with the conviction, that it underwent the examination of our senses, or was perceived by us at some former period.

When we imagine, that we stand in the midst of a forest, or on the top of a mountain, but are snug all the while in our own chimney corner, these pleasing ideas of woods, and of skies painted over us, and of plains under our feet, are mere conceptions. But when with these insulated conceptions, we connect the relation of time; and they gleam upon our souls, as the woods, plains, and mountains of our youthful days; then those intellectual states, which were before mere conceptions, become **REMEMBRANCES**. And the susceptibility, which the mind possesses of these latter complex states, is what usually goes under the name of the power or faculty of **MEMORY**.

§. 264. *Of differences in the strength of memory.*

The susceptibility of remembrances is the common privilege of all, and, generally speaking, it is possessed in nearly equal degrees. To each one there is given a sufficient readiness in this respect; his ability to remember is such, as to answer all the ordinary purposes of life. But, although there is in general a nearly equal distribution of this power, we find a few instances of great weakness and other instances of great strength of memory.

It is related of the Roman orator, Hortensius, by Seneca,

that, after sitting a whole day at a publick sale, he gave an account from memory, in the evening, of all things sold, with the prices and the names of the purchasers, and that this account, when compared with what had been taken in writing by a notary, was found to be exact in every particular.

The following is an instance of strength of memory somewhat remarkable.—An Englishman, at a certain time, came to Frederic the Great of Prussia for the express purpose of giving him an exhibition of his power of recollection. Frederic sent for Voltaire, who read to his majesty a pretty long poem, which he had just finished. The Englishman was present, and was in such a position, that he could hear every word of the poem; but was concealed from Voltaire's notice. After the reading of the poem was finished, Frederic observed to the author, that the production could not be an original one; as there was a foreign gentleman present, who could recite every word of it. Voltaire listened with amazement to the stranger, as he repeated, word for word, the poem, which he had been at so much pains in composing; and giving way to a momentary freak of passion, he tore the manuscript in pieces. A statement, being made to him of the circumstances, mitigated his anger, and he was very willing to do penance for the suddenness of his passion by copying down the work from a second repetition of it by the stranger, who was able to go through with it, as before.

A great number of instances of this description are found in the records of various individuals, but they must be considered as exceptions to the general features of the human mind, the existence of which cannot be explained on any known principles. As no one can tell, why one oak on the mountains is tall and large, while its neighbour, on the same soil and of the same description of trees, remains stunted and dwarfish; so we find ourselves unable to give any philosophick explanation of such instances as have been mentioned.

But there are also weak memories, so much so, as to be

properly considered exceptions to the generally equal distribution of this mental susceptibility. Individuals can be found, from whose memory truths have passed away almost the moment after they have been acquired; and who, in the management of the common concerns of life, discover a forgetfulness extremely unfortunate and perplexing. Instances of this kind are indeed not so frequently found recorded as of an opposite description; because it is more pleasing and satisfactory to the literary annalist to record the excellencies, than the defects of the mind.

§. 265. *Power of memory in operating with numbers.*

There have been some remarkable instances of mental power in operating with numbers;—One (§. 63.) has been before stated. These instances differ from those, where a good degree merely of natural talents has been improved by assiduous efforts. The combination of good natural abilities and of long continued practice has wrought out for many individuals usefulness, admiration, and fame. These worthy cases may be considered common; others, like that of Buxton, a native of Derbyshire, Eng. are extraordinary. This singular man had no education, not being able to write his name; however, it is said, that he learnt the multiplication table in his youth. He invented an unwieldy sort of notation, reckoning, after he had gotten beyond millions, by tribes, and by cramps;—a method, which probably no one else has ever thought it worth while to employ. Among his common operations in figures was that of multiplying five or six figures by as many, or dividing as large sums, without pen, chalk, or slate, in as short time as the most expert arithmeticians could do it with them. It is mentioned of him, as a well attested fact, that on a certain occasion he multiplied thirty nine figures by thirty nine figures. This took him some time; but when we remember, that the operation was performed without slate, or paper, or any other aids of the kind, it is well worthy of admiration. This person was capable of great abstraction of thought. Ignorant as he was, numbers had a peculiar charm for him,

and he could pursue his calculations in the midst of noise and company, as well as in solitude.

On the case of Jedediah Buxton, as well as on that above referred to, and on others similar, two remarks are to be made; and if these are not enough to explain them, it is to be hoped, that, in due season, further light may be thrown on these intellectual phenomena.

(1) It appears, that in all such instances, the susceptibility of remembering numbers is very great. As to their power of remembrance in other things, there seems to be but little evidence, that they were anxious to make the trial.—(2) There is a wonderful power of attention. They are capable of withdrawing their thoughts from other things, and of fixing them, in a very high degree, on the calculations, with which they are occupied. This ability of directing the mind to one subject, exclusively of a regard to others, implies, of course, a strong feeling of interest or desire; and figures have for all these persons a charm, which is not possessed by any other signs of thought. These are the prominent facts; and many will think, nothing more need be said.

But it is replied, that they perform their operations with very uncommon rapidity. True;—so the expert accountant, who makes no pretensions to any other readiness, than can be acquired by practice, sums up in a minute a column of figures, which would occupy another person an half an hour. The rapidity of their operations is to be chiefly attributed to habit.

NOTE. We have known nothing more remarkable, than the following instance. In the summer of 1812, a youth appeared in London about eight years of age, a native of the United States. His education had been very limited, and like Jedediah Buxton, he was unacquainted both with writing and cyphering. As the report of his being somewhat of a prodigy was rapidly circulated, many persons, very soon after his arrival in London, made it a point to call and converse with him. It was found, that he could determine with the greatest ease and despatch the exact number of minutes or seconds in any given period of time. He was able to tell the exact product, arising from the

§. 266. *Of exploded opinions in regard to memory.*

It is fortunate, that, at the present day, there is such a general disposition to apply the inductive method of reasoning, in attempting to ascertain the general facts or the laws of our mental operations. In general, no one stops to inquire, *how* the mind operates, although that may be a proper inquiry when pursued on the inductive method, but *what* are its operations; and free from the impatience of those, who are continually offering hypotheses, we are required to observe and to classify. It has not always been thus. Men have too often speculated, rather than examined; and have taken up with the mere suggestions of their fancies.

We have formerly been furnished with hypotheses in regard to the memory, as well as other acts of the mind; not to say any thing of the hypotheses in respect to the general nature of the mind itself. The following are the ideas of Malebranche, as they are found in his *Search after Truth*. —He supposes, that the soul has its residence in the brain, and in a particular part of it. In every perception, which we have, and in all acts of the mind whatever, there are certain changes in the fibres of the part of the brain, where the soul resides. This being admitted, he assures us, that the nature of memory is explained. It is to be

multiplication of any number, which consisted of two, three, or four figures, by any other number, made up of the like number of figures. When any number, consisting of six or seven places of figures, was proposed to him, he was found able to state, almost as soon as it was mentioned, all the factors, of which it is composed. He could extract the square and cube roots of numbers, as in the other cases, without the assistance of ink or pencil. He was asked the square root of 106,929, and before the number could be written down, he immediately answered 327. Being required to give the cube root of 268,336,125, he replied with equal promptness 645.

This lad is said to have been a native of Vermont; it does not seem, that any thing further can with much safety be offered in explanation here, than has already been said in reference to the other instances above given.

remembered, that the fibres of the brain are bent at every new perception. Now what do we find to be the fact, when the branches of a tree have been bent in a particular direction, and especially, when they have continued so for some time? Evidently, that they acquire an aptitude to be bent anew after the same manner. In the same way, the fibres of the brain, having received certain impressions by the course of the animal spirits, acquire a facility, or perhaps we may say, a habit of receiving certain arrangements. It is in this facility, that memory is said by Malebranche to consist, since we always think of the same things, when the brain receives the same impressions, and its fibres are similarly affected as at former times.

This hypothesis is somewhat different from that, mentioned at page 310, as having been received by Dr. Watts. But nothing, which is worthy to be called proof, has been offered in favour of either; and they are mentioned, not because it is necessary to confute them, but because it may be found profitable to know, what erroneous opinions have sometimes found their way into the belief of well-meaning and learned men. (See Malebranche's *Search after Truth*, Book II. chapter 5.)

§. 267. *Of the effects of disease on the memory.*

But however disposed we may be to reject such fanciful hypotheses as those above alluded to, it seems to be well established, that there is a connection of some kind between the mind and body. We rightly and fairly infer, that there is such a connection, because there are a multitude of facts, which can be explained on no other supposition; but in what way, or to what extent it exists, it would be worse than futile to assert, with the limited knowledge, which we at present possess. (See §. 94).—The general truth, however, that there is a connection of some sort between the mind and body, and, consequently, a reciprocal influence, is confirmed, besides other sources of evidence, by some facts in respect to the memory.—I have read, (says Dr. Beattie,) of a person, who, falling from the

top of a house, forgot all his acquaintances, and even the faces of his own family; and of a learned author, who, on receiving a blow on the head by a folio dropping from its shelf, lost all his learning, and was obliged to study the alphabet the second time. He further remarks, that he was himself acquainted with a clergyman, who was attacked with a fit of apoplexy. After his recovery, he was found to have forgotten all the transactions of the four years immediately preceding, but remembered as well as ever what had happened before that period. The newspapers, which were printed during the period mentioned, were read with interest, and afforded him a great deal of amusement, being perfectly new.—Thucydides, in his account of the plague of Athens, makes mention of some persons, who survived that disease; but their bodily sufferings had affected their mental constitution, so that they had no recollection of their own former history, had forgotten their friends, and every thing else.

From many instances of this kind, and from others, which go to prove, that the state of the mind, on the other hand, often has a very perceptible effect on the bodily functions, it may justly be inferred, that there is a connection existing between the mind and body, and that a reciprocal influence is exercised. But what that precise connection is; whether it be limited, on the part of the body, to the brain; on what it depends; in what ways it is modified; are inquiries, which cannot be satisfactorily answered at present, whatever hypotheses may be proposed. Why a fever, or an attack of apoplexy, or a removal of a part of the brain, or an inordinate pressure of it, which are effects on the body, should affect the mind, a spiritual substance, which is supposed to be essentially different from matter, no one is able to say.—The fact, however, that such a reciprocal connection exists, suggests a reason for a due degree of attention to the physical system. The importance of a healthy and vigorous constitution of the body, as being very nearly connected with a corresponding health and vigour of the intellectual principle, should ever be remembered by those in the pursuit of knowledge.

§. 268. *Suggestions on the ultimate restoration of thought.*

It is said to have been an opinion of Lord Bacon, that no thoughts are lost, that they continue virtually to exist, and that the soul possesses within itself laws, which, whenever fully brought into action, will be found capable of producing the prompt and perfect restoration of the collected experiences of its whole past existence. This opinion seems to be adopted in an article on the laws of association in *BIOGRAPHIA LITERARIA* of S. T. Coleridge. By looking at §. 98, it will be seen, that various facts may be brought forward, going to show, that this opinion, which involves the most important moral consequences, may have some foundation. The subject is suggested here, in consequence of the remarks in the last section, on the reciprocal influence of mind and body; it appearing beyond doubt, that in certain conditions of the body, especially when the brain is much affected, some of the laws of the mind undergo a vast increase both in strength and rapidity of operation. But as intellectual philosophy can never become the true "*METAPHYSICKS*," the true "*FIRST PHILOSOPHY*," without a continual recurrence to facts and careful inductions from them, we take this opportunity to insert the substance of a statement to be found in the *Biographia* of the last mentioned writer. It is a statement of some facts, which became known to him, in a tour to Germany in 1798.

In a Catholick town of Germany, a young woman of four or five and twenty, who could neither read nor write, was seized with a nervous fever, during which she was incessantly talking Greek, Latin, and Hebrew, with much pomp and distinctness of enunciation. The case attracted much attention, and many sentences, which she uttered, being taken down by some learned persons present, were found to be coherent and intelligible, each for itself, but with little or no connection with each other. Of the Hebrew only a small portion could be traced to the Bible; the remainder was that form of Hebrew, which is usually called Rabbinick. Ignorant, and simple, and harmless, as this young woman was known to be, no

one suspected any deception; and no explanation could for a long time be given, although inquiries were made for that purpose, in different families, where she had resided, as a servant.—Through the zeal, however, and philosophical spirit of a young physician, all the necessary information was in the end obtained. The woman was of poor parents, and at nine years of age had been kindly taken to be brought up by an old Protestant minister, who lived at some distance. He was a very learned man; being not only a great Hebraist, but acquainted also with Rabbinical writings, the Greek and Latin Fathers, &c. The passages, which had been taken down in the delirious ravings of the young woman, were found by the physician precisely to agree with passages in some books in those languages, which had formerly belonged to him. But these facts were not a full explanation of the case. It appeared on further inquiry, that the patriarchal protestant had been in the habit for many years of walking up and down a passage of his house, into which the kitchen door opened, and to read to himself, with a loud voice, out of his favourite books. This attracted the notice of the poor and ignorant domestick, whom he had taken into his family; the passages made an impression on her memory; and many years afterwards, when her body was racked with pain, and her brain burning with a fever, they were vividly restored to her recollection, and were uttered in the way, which has been mentioned.

From this instance, and from several others of the same kind, which Mr. Coleridge asserts can be brought up, he is inclined to educe the following positions or inferences.—(1) Our thoughts may, for an indefinite time, exist, in the same order, in which they existed originally, and in a latent or imperceptible state.—(2) As a feverish state of the brain, (and of course any other peculiarity in the bodily condition,) cannot create thought itself, nor make any approximation to it, but can only operate, as an excitement or quickener to the intellectual principle; it is, therefore, probable, that all thoughts are, in themselves, imperishable.—(3) In order greatly to increase the pow-

er of the intellect, he supposes it would require only a different organization of its material accompaniment.—

(4) And, therefore, the presentation of the dread book of final judgment may be no other, than the investment of the soul with a *celestial* instead of a *terrestrial* body; and that this may be sufficient to restore the perfect record of the multitude of its past experiences. He supposes, it may be consistent with the nature of a living spirit, that heaven and earth should sooner pass away, than that a single act, or thought, should be loosened and effectually struck off from the great chain of its operations.

In giving these conclusions, the exact language of the writer has not been followed, but the statement made will be found to give what seems to have been his meaning. These conclusions afford materials for reflection; the justness of them is to be determined by a consideration of the facts, on which they are founded. Similar facts, or rather facts, leading to similar conclusions, were mentioned at §. 98; and taken together, they undoubtedly show, that the mind, in consequence of alterations even in the material system merely, with which it is here connected, may be rendered susceptible of an augmentation of power and quickness in its operations, which at first sight seems inconceivable. It is, therefore, not impossible, that thoughts may hereafter be recalled, which we now imagine to be not only forgotten, but utterly lost; it is not impossible, that, at some future time, our past life may be reanimated; realizing in us not only a resurrection of the body, but a resurrection also of the multiplied acts of the soul.

§. 269. *Memory of the uneducated.*

There is a peculiarity in the memories of uneducated people, of mechanicks, farmers, day-labourers, and of all others, who, from the pressure of their particular callings, may have had but little means of mental culture. This peculiarity is seen in their great readiness in the recollection of places, times, arrangements in dress and in buildings, local incidents, &c. In their narrations they will be found to specify the time of events; not only the year, but

the month, and day, and in their description of persons and places are not less particular. This trait in the mental character of this class of people seems to have arrested the notice of Shakespeare.

Mrs. Quickly, in reminding Sir John Falstaff of his promise of marriage, discovers her readiness of recollection in the specification of the great variety of circumstances, under which the promise was made.—*Thou didst swear to me on a parcel-gilt goblet, sitting in my Dolphin chamber, at the round table, by a sea-coal fire, on Wednesday in Whitsun week, when the prince broke thy head, for likening him to a singing man of Windsor, &c.*—The coachman in Cornelius Scriblerus gives an account of what he had seen in Bear-garden;—*Two men fought a prize; one was a fair man, a serjeant in the guards; the other black, a butcher; the serjeant had red trousers, the butcher blue; they fought upon a stage about four o'clock, and the serjeant wounded the butcher in the leg.*

The explanation of this peculiarity of memory in common people is this.—It will be kept in mind, that our remembrances are merely conceptions, modified by relations of past time. Removing then the modification of past time, and the remaining element of our remembrances will be conceptions. Our conceptions cannot be called up by a mere voluntary effort, because to will the existence of a conception necessarily implies the actual existence of the conception already in the mind. Our conceptions, therefore, arise in the mind on the principles of association or simple suggestion.—We come, then, directly to the fact, which explains that peculiarity or characteristic of memory, of which we are speaking.

The knowledge, which is possessed by persons of very small education, will be found to be connected together by the most obvious and easy principles of association; for instance, contiguity in place and time. These people have been very much, we may say chiefly, in the practice of associating those things, which happened at the same time, or were proximate in position. It may be thought, that mere time and place are very unimportant relations, but

however that may be, they most strongly seize the notice of persons of small education ; and by means of them, their overflowing multitude of remembrances is kept in place. Having by almost constant exercise greatly strengthened the tendency to those associations, which exist in consequence of mere contiguity, they can very readily tell you, not only the precise *place*, where any thing has happened, but almost every thing, which has happened in the immediate neighbourhood ; not only the *time*, when the event occurred, but many other things, which occurred about the same period. (See in connection with these remarks, §. 158.)

§. 270. *Memory of men of philosophick minds.*

From speaking of the power of remembrance in the uneducated, we naturally turn to persons of a reflecting, and philosophick mental character. It has often been remarked of such, that they discover want of readiness of recollection. The servant in the family of the philosopher will be likely to know much more about the fields, and fences, and cattle of the neighbours ; will be more minutely acquainted with their individual dress, and manners, and habits, than the philosopher himself. More than this, he has an aptness, an ability at remembering things of this nature, which his philosophick master evidently does not possess.—Again, we suppose a battle to have been fought ; persons of limited intellectual culture will tell you the precise day of the month, the exact number of troops, the names of the regiments, the amount of killed and wounded, and many trifling incidents of individuals, whether solemn or ludicrous, which are fitted subsequently to enliven the narrations of the fireside. But the philosopher, who has read the same accounts, does not remember these particulars, and finds it a very difficult thing to do it. But we perceive, that his mind has been profitably employed in reflections on the causes of the battle, on various striking developements of human character in its heat and bustle, and on its effects upon the happiness, or misery of families, and nations.

Many have imagined, that the memory of the uneducated, because it deals so much in minute particulars, is intrinsically stronger, than of others. It is, no doubt, to the multitude a more imposing species of memory, and admirably answers the purpose of those, in whom it appears. But mere contiguity in time and place, which is almost the sole principle that binds together events in the recollection of such persons, is of but small consequence in the estimation of the philosopher. He looks more deeply into the nature of things; their mere outward and incidental circumstances do not particularly arrest his attention; and consequently his knowledge is connected together by less obvious and ready, but more important principles, such as analogy, cause and effect.

§. 271. *Of the memory of the aged.*

A defect of memory is often noticed in persons, who are advanced in years. Very few retain those powers of recollection, which they possessed in earlier days. "Age, says Ossian, is now on my tongue, and my soul has failed; memory fails on my mind."

The failure of this mental susceptibility in the aged seems to be owing to two causes, viz. the impaired state of the organs of perception, and a defect of attention.

(1) *Their organs of external perception are impaired.*

We find it difficult, in consequence of the failure of their sense of hearing, to converse with people, advanced in years, and it requires a great effort, both in our part and theirs, to make them understand what we say. The most conclusive arguments, and flashes of wit, and rich strains of musick have in a great measure ceased to excite in them any interest.—There is a like failure of the sense of seeing also. They no longer take pleasure in the delightful aspects of creation; and the waving forest, and the gay beams of the sun, although they have not ceased to have charms for others, have none for them.—All the other senses fail of their wonted operation in the same way; and the natural and necessary consequence is, that the

ideas, which are let in by the senses, make but a very feeble impression, and are almost immediately erased from the mind.

(2) *The second cause of the weakness of memory, of which old people complain, is a defect in attention.*—That mental exercise, to which we give the name of attention, always implies desire, an emotion of interest; and without an emotion of this description, it cannot exist. But the world, (including in the term what is beautiful in nature, and what is important in the duties and callings of life,) has at last ceased to excite the emotions, which it formerly awakened. The aged are like the prisoner, released, in the period of the French revolution, from the Bastille; they find themselves, as it were, in a new creation, which passes before them with great indistinctness, and with which they feel but little sympathy. And why should it be thought unnatural, that they should neglect in some measure that scene of things, which has already learnt to forget and to neglect them? As their organs of external perception have failed them, and there has also been a defect of attention, the memory, as a natural consequence, has become powerless and broken.

It should, however, be remarked here, that, notwithstanding what has been said, aged people often recal, with great readiness and precision, the feelings and the incidents of their youth. As when a man, who has been greatly prospered, but who at last meets with sudden and disastrous reverses of fortune, finds, in this new state of things, his obsequious attendants fleeing away and turning against him, while only a few early friends remain unmoved in evil and good report; so early feelings and early associations appear to cling with a faithful fondness to the shattered intellects of the aged. The old soldier, who had a share in the American Revolution, will sit down by his fireside and describe with great particularity the scenes, where he toiled and bled, and yet be quite unable to give an account of the incidents of the preceding week.

The explanation of this trait in the mental aspects of the aged seems to be this.—As a general statement, our

early feelings and our early associations are the strongest. That they should be so is not strange, since we have then entered on a state of things, which, in its essential features, is new, and which, in all its diversities of duty, and pleasure, and danger, attracts, and excites us by continual novelty. Who can forget the plains, where he wandered in early life? Who can erase from his recollection the associates of those days of wonder, activity, and hope? Who can obliterate from his heart his toils, and his sufferings, and his joys, all which assumed a peculiar emphasis and importance, being connected with future prospects, the adversities and the successes of after life?—These things remain, while others vanish. Such feelings, so deeply fixed in the mind, and bound together and made permanent by the strength of a mutual association, are frequently recalled; they recur to the soul in the activity and bustle of life, and in those more favoured moments, when it is given up to silent and solemn meditations. The effect of this frequent recurrence can easily be imagined. The early impressions, which are the subjects of such recurrence, become in time, if one may be allowed the expression, a part of the mind itself; they seem to be woven into its existence. Hence old men, who have no eye and no hearing for the events, that are passing around them, repeat, with the greatest animation, the stories of scenes, and actions, and friendships of fifty years ago.

§. 272. *Memory of persons of a rich imagination.*

It is a remark of Dr. Watts, that a fine genius is often found to have but a feeble memory. By a fine genius he probably understood what we commonly mean by a person of a rich imagination; that is, one, who is furnished with a rich store of images, has readiness in the perception of their congruity or incongruity with each other, and of course has great power in the formation of various new combinations.

Such a person finds a luxuriance of wealth in himself. He is continually and happily entertained with the new pictures, which his imagination creates. Hence he does

not so much entertain himself with outward events ; many facts, which are particularly noticed and retained by others, pass by him unregarded ; and, therefore, quickly escape from his remembrance. Montaigne (§. 7.) seems to have been a person of this description ; acquainted with the general principles of the sciences, possessing an exuberance of intellectual riches, but utterly incapable of remembering dates, times, places, and the numerous matters-of-fact of every day's occurrence.

Weakness of memory in persons of a rich imagination is discovered also in their reading of books. The reason of it seems to be a too great confidence in their own ability. Conscious of their own resources, they are tempted to peruse books in a hasty and careless manner, and without due attention. The result of this careless manner, both in respect to events and the sentiments of authors, is that they are but imperfectly known at first, and are very speedily forgotten. This will not appear strange, in connection with the remarks at §. 175, on the connection existing between memory, and attention. The weakness of memory, therefore, in persons of rich imagination is not constitutional and permanent, but a matter of mere accident ; and, for this reason, the more discreditable. When such persons have habitually taken an interest in the common affairs of life, they are found to remember their details, however unpoetical ; and in their reading of authors nothing seems to be wanting, but interest and attention, in order to secure them from the reproach, under which they are thought to labour.

§. 273. *On the compatibility of strong memory and good judgment.*

By JUDGMENTS we in general understand nothing more than the opinions, which we form in view of evidence ; in other words, they are the results or conclusions of moral reasoning. By a person of *good* judgment, we generally mean one, who examines subjects with caution, and whose results, founded on such examination, for the most part, prove correct. That persons may possess, in a very high degree, the susceptibility of memory, and still be incapable

of correct moral reasoning, or of exhibiting any other indications of a well judging mind, is a fact well known. There have even been idiots, who certainly could present no claims to the character of judging well, that have, nevertheless, been remarkable for memory. Such are, indeed, instances of an extreme kind ;—however, there are not wanting many other cases, where strong memories have been found united with feeble judgment. On this fact, it may be remarked, as follows.

The connection between a strong memory and a weak judgment, it may be said without any hesitation, is not necessary, but merely accidental ; that is, is not the constitution of nature, but in general the result of circumstances. As it is an accidental state of things, and not any thing essential and permanent in our mental structure, we must look for its appropriate cause in erroneous mental discipline.—It may well be supposed, that those, who possess strong memories, are not insensible of their excellence in this respect ; and the approbation, which they have received in consequence of it, encourages them to treasure up a dry collection of all facts, which will, in any way, bear repetition. Dates, genealogies, local incidents, traditional anecdotes, are all seized, and retained with peculiar avidity. But too much intent upon the mere dates and names of things, such persons fail to inquire into their true nature ; they neglect other and more important forms of mental discipline ; and thus justly sustain the reputation of possessing a showy, rather than discriminating and sound knowledge. In instances of this description, the relations, by which the suggested trains of thought are associated, are the more slight and obvious ones, such as of time, place, &c. But there are some exceptions to this unwise course ; individuals may be found, who, with an astonishing ability to recal the most unimportant incidents of daily occurrence, as well as the dry details of historical facts, combine the far more enviable ability of discriminating the true differences of things, of combining means for the attainment of ends, and of rightly estimating evidence in its various ap-

plications ; which are among the characteristics of men of sound judgment.

§. 274. *Intentional memory or recollection.*

The definition of MEMORY, which has been given, is, that it is the power or susceptibility of the mind, from which arise those conceptions, which are modified by the relation of past time. This definition necessarily resolves memory in good part into association, or what Mr. Brown has preferred to term suggestion. It is, therefore, to be here observed, that our trains of associated thought are not voluntary ; that is, are not directly under the control of the WILL. They come and depart, without it being possible for us to exercise any thing more, than an indirect government over them. (See §. 173.) It follows from these facts, that our remembrances also are not voluntary ; or, in other words, it is impossible for us to remember in consequence of merely choosing to remember. To will or to choose to remember any thing implies, that the thing in question is already in the mind ; and hence there is not only an impossibility resulting from the nature of the mind, but also an absurdity, in the idea of calling up thought by volition. Our chief power, therefore, in quickening and strengthening the memory, will be found to consist in our skill in applying and modifying the various principles or laws of association. And this brings us to a consideration of what is called INTENTIONAL MEMORY OR RECOLLECTION ; a subject, which was partly illustrated in the section above referred to.

Whenever we put forth an exercise of intentional memory, or make a formal attempt to remember some circumstance, it is evident, that the event in general, of which the circumstance when recalled will be found to be a part, must have previously been an object of attention. That is, we remember the great outlines of some story, but can not, in the first instance, give a complete account of it, which we wish to do. We make an effort to recal the circumstances not remembered in two ways.—We may, in the *first* place, form different suppositions, and see, which

agrees best with the general outlines ; the general features or outlines of the subject being detained before us, with a considerable degree of permanency, by means of some feeling of desire or interest. This method of restoring thoughts is properly an inference of reasoning.

We may, in the *second* place, delay upon those thoughts, which we already hold possession of ; and revolve them in our minds ; until, aided by some principle of association, we are able to lay hold of the particular ideas, for which we were searching. Thus, when we endeavour to recite what we had previously committed to memory, but are at a loss for a particular passage ; we repeat, a number of times, the concluding words of the preceding sentence. In this way, the sentence, which was forgotten, is very frequently recalled.

§. 275. *Instance illustrative of the preceding.*

We had occasion, in a former section, to mention the case of an individual, who, in consequence of an attack of apoplexy, forgot all the transactions of the four years immediately preceding. It is further to be observed here, that the same individual recovered by degrees all he had lost ; so as after a while to have nearly or quite as full a remembrance of that period, as others. In this instance the power of the principles of association appears to have been at first completely prostrated by the disease, without any prospect of their being again brought into action, except by some assistance afforded them. This assistance, no doubt, was reading and conversation. By reading old newspapers and by conversation, he, from time to time, fell upon ideas, which he had not only been possessed of before, but which had been associated with other ideas, forming originally distinct and condensed trains of thought. And thus whole series were restored.—Other series again were recovered by applying the methods of INTENTIONAL RECOLLECTION ; that is, by forming suppositions and comparing them with the ideas already recovered, or by continually revolving in mind such trains as were restored, and thus rousing up others. Such, we can hardly doubt,

to have been, in the main, the process, by which the person, of whom we are speaking, recovered the knowledge, he had lost.

These views, in addition to what has now been said, may be illustrated also by what we sometimes observe in old men. Question them as to the events of early life; and at times, they will be unable to give any answer whatever. But whenever you mention some prominent incident of their young days, or perhaps some friend, on whom many associations have gathered, it will often be found, that their memory revives, and that they are able to state many things, in respect to which they were previously silent.

§. 276. *Marks of a good memory.*

The great purpose, to which the faculty of memory is subservient, is, to enable us to retain the knowledge, which we have from our experiences, for future use. The marks of a good memory, therefore, are these three, viz. Facility in receiving ideas, tenacity in retaining them, and readiness in bringing them forward, on necessary occasions.

FIRST; of facility in receiving ideas.—We frequently find this characteristick of a good memory in persons of small education; and it is not incompatible with a very limited genius. For whatever else may be said, it can justly be observed, that the abundance of a man's remembrances does not necessarily prove him, either a learned man, or of a philosophick turn. Still the trait is a valuable one, considered in itself. The intellectual habits of persons of small education, and the methods, which they follow, in retaining their knowledge, have been before partially explained. It is not, therefore, wonderful, that they should exhibit great facility in the reception of ideas of remembrance, inasmuch as they deal almost wholly with the outside or surface of things, not only seizing upon their obvious and obtrusive appearances, but connecting them together by the most obvious laws of association.

SECOND; of power of retaining ideas.—Memories, which have great facility in the reception, are sometimes very tenacious of what they have gotten; but most com-

monly the latter quality characterizes the memory of a different class of people ;—we mean persons of reflection, who deal more with principles than facts, except when facts are brought forward to confirm and illustrate principles.

THIRD ; of readiness in producing what is remembered.—In general those persons, who possess great facility in the reception of ideas, are no less ready in calling them into service, when occasion offers. It is not common to find them at a loss. But, as their thoughts are connected together by slight and casual relations, they often succeed each other in a disorderly and irregular manner. For the most part, they are found to have ideas enough, and words enough ; but it is not so evident, that what they have to say is always suitable to the occasions, on which it is produced. These persons, however, often give an interest and a variety to common conversation, which it is very difficult for minds of a higher order to do.—The latter class of persons have reduced the particulars of their knowledge to principles ; it is, therefore, firmly fixed, and cannot be readily wrested from them ; but principles cannot be so easily brought forward on ordinary occasions, nor are they found to be so attractive and acceptable with the multitude, as facts. The incidents of a murder, when the story is well told, arrest the attention of the great mass of people much more strongly, than a philosophical dissertation on the nature and aggravation of the crime.

§. 277. *Of the advantages of this faculty.*

But whether we have a memory, possessing more or less of those marks, which belong to it, as it exists in its highest state of perfection ; it is a faculty always securing to us inestimable benefits.—As there could not be any comparison of our ideas without it, it is, in the first place, the foundation of the greatest part of our knowledge ; and without its assistance the human mind would necessarily be sunk into the lowest form of idiocy.—And, secondly, the susceptibility of remembrances is not only necessary to us as *intellectual*, but also as *moral* beings.—Without

memory we should certainly be incapable of gratitude for kindnesses received. We should be incapable of esteem, which is founded on a view of a variety of acts and qualities; and be destitute also of many other moral judgments and emotions.

§. 278. *Means of improving the memory.*

But if this faculty be so exceedingly important, it becomes us to consider in what way it may be improved. On this point the following directions are particularly worthy to be followed.

(1) *We are, in the first place, to make a selection among the particulars of our knowledge.*—It is unwise to try to remember every thing. A memory thus loaded may be compared to what Milton calls the Fathers, a *drag-net*, which comes floating down to us on the stream of time, and bearing articles of most disproportionate value, shells and shell-fish, jewels and pebbles, sticks and straws, seaweeds and mud. It is important, therefore, to distinguish things aright; and in the multitude of particulars of greater and less value, to retain those only, which are of some real worth.

(2) *We are to refer our knowledge, as much as possible, to general principles.*—To refer our knowledge to general principles is much the same as to classify it; at least this is the best mode of classification. If a lawyer or merchant were to throw all their papers together promiscuously, they could not calculate on much readiness in finding what they might at any time want. If a man of letters were to record in a commonplace book all the ideas and facts, which occurred to him, without any method, he would experience the greatest difficulty in applying them to use. It is the same with a memory, where there is no classification. Whoever fixes upon some general principle, whether political, literary, or philosophical, and collects facts in illustration of it, will find no difficulty in remembering them, however numerous; when without such general principle the recollection of them would have been extremely burdensome.

(3) *Never be satisfied with a partial or half acquaintance with things.*—There is no less a tendency to intellectual, than to bodily inactivity ; students, in order to avoid intellectual toil, are too much inclined to pass on in a hurried and careless manner. This is injurious to the memory. “Nothing (says Dugald Stewart) has such a tendency to weaken, not only the powers of invention, but the intellectual powers in general, as a habit of extensive and various reading without reflection.” Always make it a rule fully to understand what is gone over. Those, who are determined to grapple with the subject in hand, whatever may be its nature, and to become master of it, soon feel a great interest ; truths, which were at first obscure, become clear and familiar. The consequence of this increased clearness and interest is an increase of attention ; and the natural result of this is, that the truths are very strongly fixed in the memory. A perpetual vacillation between the honours and toils of science is a species of “halting between two opinions,” that is not less injurious in learning, than in religion.

(4) *The memory may be strengthened by exercise.*—It is found, that all the mental susceptibilities are strengthened by exercise, much the same as our bodily powers ; and the faculty of memory certainly not less than others. This fact, which seems to be an ultimate law of our constitution, reminds one of a certain Milo, an inhabitant of Crotona. This man is said to have carried an ox on his shoulders ; but he could do it, only by beginning with carrying a calf. He practised this every day ; as the animal grew in size, the firmness of his joints and his muscular strength increased also ; and thus he gradually became able to support such an enormous burden. And, in the same way, our minds when left to sloth and inactivity, lose all their vigour ; but when they are kept in exercise, and, after performing what was before them, are tasked with new requisitions, it is not easy to assign limits to their ability.

(5) *Consider the nature of the study, and make use of those helps, which are thus afforded.*—This rule may be illustrat-

ed by the mention of some departments of science. Thus, in acquiring a knowledge of geography, the study is to be pursued, as much as possible, with the aid of good globes, charts, and maps. It requires a great effort of memory, and generally an unsuccessful one, to recollect the relative extent and situation of places, the numerous physical and political divisions of the earth, from the book. The advantages of studying geography with maps, globes, &c. are two, (1)—The form, relative situation, and extent of countries become, in this case, ideas, or rather conceptions of *sight*; such conceptions (§. 187.) are very vivid, and are more easily recalled to remembrance, than others.—(2) Our remembrances are assisted by the law of contiguity in place (§. 158), which is known to be one of the most efficient aids. When we have once, from having a map or globe before us, formed an acquaintance with the general visible appearance of an island, a gulf, an ocean, or a continent, nothing is more easy than to remember the subordinate divisions or parts. Whenever we have examined, and fixed in our minds the general appearance or outlines of a particular country, we do not easily forget the situation of those countries, which are contiguous.

We find another illustration of this rule in the reading of history.—There is such a multitude of facts in historical writings, that to endeavour to remember them all is fruitless; and if it could be done, would be of very small advantage. Hence, in reading the history of any country, fix upon two or three of the most interesting epochs; make them the subject of particular attention; learn the spirit of the age, and the private life and fortunes of prominent individuals; in a word, study these periods not only as annalists, but as philosophers. When they are thus studied, the mind can hardly fail to retain them; they will be a sort of landmarks; and all the other events in the history of the country, before and afterwards, will naturally arrange themselves in reference to them. The memory will strongly seize the prominent periods, in consequence of the great interest felt in them; and the less important parts of

the history of the country will be likely to be retained, so far as is necessary, by aid of the principle of contiguity; and without giving them great attention.—Further, historical charts or genealogical trees of history are of some assistance for a similar reason, that maps, globes, &c. are in geography.

This rule for strengthening the memory will apply also to the more abstract sciences.—“In every science, says Stewart, the ideas, about which it is peculiarly conversant, are connected together by some particular associating principle; in one science, for instance, by associations founded on the relation of cause and effect; in another, by the associations founded on the necessary relations of mathematical truths.” (Stewart’s Philosophy of the Human Mind, CHAP. VI. SECT. III.)

§. 279. *Of committing to writing as a means of improving the memory.*

It is often recommended to us to commit to writing the knowledge, which we acquire. This practice is unfavourable in this respect—it supersedes, in a degree, the necessity of a direct exercise of the memory. It may be remarked, in particular, that persons, who follow this method, are found to fail in the recollection of detached observations, & of insulated facts. This practice, therefore, promises but little benefit to persons, who are much occupied with the active business of life, and have but little time for reading and reflection; to whom, consequently, a very ready, as well as tenacious memory is of great importance.

But for others, for persons in some professional business, and for professed scholars, it has some considerable advantages; such as the following.—The records, which we make of our experiences and thoughts, are a sort of landmarks of the progress of our own minds, with which certainly it is highly desirable to be acquainted. But they not only show us what progress our minds have made; they are among the means, by which that advancement itself has been secured.

In particular, this practice enables one to make improvements on those, who have gone before, or rather aids him in so doing. A person, when he has completed his education, finds, there is a certain amount of knowledge, and that he has learnt what there is to be learnt; but, surely, he is not to rest satisfied with this. He must do something himself; he is bound in some way to contribute to the stock of information, which has been collected. Now, when a student is in the practice of noting down new facts, and his own original thoughts upon them, he not only secures them, but he thus gives to himself the opportunity of making them the further subject of his reflections. And having done this, these new results become to him a sort of elementary truths; they are not only one step in advance of what is any where to be found in books, but, like all new discoveries, they in their turn become helps in making yet further advancements. Sometimes great improvements in science have resulted from a single remark, or from a slight hint, which was, at the time, thought to be of the smallest consequence.

It cannot be doubted, therefore, that, to a certain extent, the noting down of facts, which we observe, the recording of our own mental deductions, and of important ideas in reading, is a practice of very considerable utility to those, who have opportunities of mental culture.

§. 280. *Of Mnemonicks or systems of artificial memory.*

By a system of mnemonicks or of artificial memory is meant "a method of connecting in the mind things difficult to be remembered, with things easily remembered, so as to enable it to retain and recollect the former by means of the latter."—There have been no less than sixty different authors, who have proposed their plans for this purpose, many of them agreeing in the most important respects, but all of them differing in some.

Among the most used of these is Gray's *MEMORIA TECHNICA*. It contains a great deal of historical, chronological and geographical knowledge, embraced in a set of rules, which

the student is required to make as familiar to himself, as school-boys do the rules of grammar. Some alterations are made on the final syllables of words, so as to make them significant of dates or other important particulars. There have been various opinions in respect to this system; but the prevailing feeling seems to be against it.

Among the most popular writers on the subject of Mnemonicks, who have recently appeared, is M. Gregor von Feinagle; but a statement of the principles of his system would occupy too large a space in this book. Nor, after bestowing some reflection on the subject, can we consider the omission a very serious disadvantage.—It is, no doubt, possible to aid the memory by arbitrary arrangements and by associating our ideas with a set of places and images; and such assistances may, at some times, be of considerable advantage to publick speakers, and in general to all persons, who may have occasion to remember a large number of insulated facts. But, notwithstanding, it may be said of the systems now in use, as a general remark, that they are too complicated for plans, which profess to render the acquisition of knowledge more easy. They can never be adopted into general use, unless they are rendered more simple; nor do we apprehend, that a person, who follows the rules for strengthening and applying the memory above laid down, will stand greatly in need of any other helps in recollecting most things, that will be found to be useful and important.

CHAPTER TWENTY THIRD.

EMOTIONS OF BEAUTY.

§. 281. *Explanation of emotions of beauty.*

There is a class of our mental feelings, to which we commonly give the name of EMOTIONS. We speak of a melancholy emotion, of a cheerful emotion, of emotions of pity, of wonder, and the like. Among other emotions are those

of BEAUTY and SUBLIMITY.—In the present chapter, our attention will be particularly directed to those of beauty.

Of emotions of beauty it is hardly less difficult to give a definition, than to define the sensations of colour, or of taste. We find in them, however, these marks or characteristics.—(1) The emotion of beauty is always a pleasing one. We never give the name to one, which is painful, or to any feeling of disgust. Whenever, therefore, we speak of an emotion of beauty, we imply, in the use of the terms, some degree of satisfaction or pleasure. All persons, the illiterate as well as the scientific, use the phrase with this import. —(2) We never speak of emotions of beauty, to whatever degree may be our experience of inward satisfaction, without referring such emotions to something external. The same emotion, which is called satisfaction or delight of mind, when it is wholly and exclusively internal, we find to be termed an emotion of beauty, if we are able to refer it to something without, and to spread its charms around any external object. (See §. 19.)

§. 282. *Of what is meant by beautiful objects.*

There are a great variety of material objects, which excite the emotion of beauty ;—that is, when the objects are presented, this emotion, in a greater or less degree, (for the emotion itself is susceptible of many varieties,) immediately exists.—As to the existence of material objects, it is unnecessary to dispute. We take it for granted ; although if we were called upon for a definition of them, we could only say, that they are mere assemblages of particles, and that the different arrangements of those particles constitutes the difference between one object and another. The ashes, that are mouldering in the tomb, do not differ from the living form of man in the materials, but only in disposition, and in symmetry. In themselves considered, therefore, all bodies of matter are without beauty ; the fairest creations of architecture, and the dust, on which they are erected, are alike ; all are originally destitute of that interest, which we denominate beauty.

The beauty of objects being something not in the nature of the things themselves, although we constantly speak of them, as possessing that quality, it is necessary to enter into some explanation.—Whenever certain objects are presented to us, there is a feeling of pleasure, in a higher, or less degree. This feeling, which is termed an emotion of beauty, does not exist, it will readily be admitted, in the object, which cannot be supposed to be susceptible of it, but in the mind. And here we have the solution of the point, on which we are remarking.—We have from earliest childhood been in the habit of referring this mental emotion, of which no inanimate object can possibly be susceptible, to external objects, as its antecedent. We have made this reference, for so long a time, and so frequently, that at last, in consequence of a very tenacious association, the object itself seems to us to be invested with delight, and to beam out with a sort of intellectual radiance; that is, to have qualities, which can truly and properly exist only in the mind. Such objects are termed by us BEAUTIFUL OBJECTS.

The result of this strong and early disposition, to refer the emotions within us to those external objects, which are the antecedents to them, is, that all material creation is clothed over again. There is a beauty in the sun; there is a beauty in woods and waters; and blossom, and flower, and fruit are all invested with the same transferred or associated splendour. But annul the emotions of the mind, which throws back its own inward light on the objects around it; and the sun will become dark, and the moon will withhold its shining, and the flower will be no more delightful, than the sod, from whose mouldering bosom it springs up.

§. 283. *Extensive application of the term beauty.*

Emotions of beauty are felt, and perhaps in a higher degree than any where else, in the contemplation of objects of sight, of woods, waters, azure skies, cultivated fields, and particularly of the human form. But they are not limited to these; emotions, which not only bear the same

name, but are analogous in kind, exist also on the contemplation of many other things.

The sense or feeling of beauty exists, when we are following out a happy train of reasoning; and, hence, the mathematician, who certainly has a delightful sensation, analogous to what we experience in contemplating many works of nature, speaks of a *beautiful* theorem.—The connoisseur in musick applies the term, *beautiful*, to a favourite air; the lover of poetry speaks of a beautiful song; and the painter discovers beauty in the design and in the colouring of his pictures. We apply the term, beauty, to experiments in the different departments of physicks; especially when the experiment is simple, and results in deciding a point, which has occasioned doubt and dispute.—Also, in the contemplation of moral actions, we find the same feelings. The approbation, which we yield, when the poor are relieved, and the weak are defended, and any other deeds of virtue are done, is not merely the cold assent of the head, but is always attended with a delightful movement of the affections.—So that all nature, taking the word in a wide sense, is the province of beauty; the intellectual, and the moral, as well as the material world.

But a remark is to be made here of some consequence, in connection with some of the numerous speculations, that have been at different times offered on the subject of beauty. It has been thought by some, that the application of the term to any other objects than those of external nature, is wholly metaphorical.—In reply it may be said, that we do truly feel a delightful emotion on the contemplation of intellectual works, and when we observe virtuous actions, no less than when our attention is fixed upon the pleasing appearances of the natural world. And there is such an analogy, such a resemblance in the feelings in all these cases, that, if the term, beauty, be proper to express one, it is no less appropriate to all. Instead, therefore, of considering this term as metaphorical, whenever applied to any thing other than the external appearances of nature, it is better to speak of it, as a *common name*, ex-

pressive of a variety of emotions, arising on different occasions, but always pleasing, and varying rather in the occasions of their origin and in degree, than in their real nature.—In particular, they agree in their nature as to this;—we refer all the emotions, which come under the denomination of beauty, to the objects, whatever they may be, which are found immediately and constantly to precede them. The charm of the mind, which exists solely in ourselves, seems to flow out and to spread itself over the severest labours of intellect, over the creations of the architect, over the fictions of the imagination, over virtuous moral actions, and whatever else we call beautiful, no less than upon those forms of material nature, which fill us with delight.

“Mind, mind alone—Bear witness, earth and heaven!

“The living fountain, in itself contains

“Of beauteous and sublime!———

§. 284. *All objects not equally fitted to excite emotions of beauty.*

In view of what has been said, BEAUTY may be defined a pleasing emotion, excited by various objects, but which, in consequence of an early and tenacious association, is always felt by us, as if diffused over, and existent in the objects, which excite it. An object, therefore, is called beautiful, when it is the cause or invariable antecedent of the emotion of beauty. But no one can be ignorant, that not all objects cause the emotion, and of those, which do, some have this power in a greater, and some in a less degree. This brings us to a very important inquiry. It is no unreasonable curiosity, which wishes to know, why the effect is so limited, and why all objects are not embraced in it? Why different objects cause the same emotion in different degrees? And why the same objects produce a diversity of emotions in different individuals, and even in the same individual at different times?

§. 295. *A susceptibility of emotions of beauty an ultimate principle of our constitution.*

In answering these questions, something must be taken for granted, there must be some starting point; otherwise all, that can be said, will be involved in inextricable confusion. That is, we must take for granted, that the mind has an original susceptibility of such emotions. Nor can we suppose, there can be any objection to a concession, which is warranted by the most general experience. We all know, that we are created with this susceptibility, because we are all conscious of having had those emotions, which are attributed to it. We may, therefore, repeat here a remark made at §. 19.—No reason whatever can be given, why any combination of objects or of actions, why any exhibition of purpose or of power, causes a new state of mind, of that class termed emotions, any more than actions and objects, purposes and powers utterly unknown to us, except it be this, that a susceptibility of emotions is one of the constituent and original characteristics of the intellectual principle.

These remarks have considerable importance, in connection with the views of those, who resolve all emotions of beauty into *association*.—Those, who resolve the *whole* effect of beautiful objects into association, commit that sort of sophism, which logicians call REASONING IN A CIRCLE. When we speak of association in reference to objects and emotions of beauty, the province, which we assign to it, is, to impart to one thing the agreeable or disagreeable effects of another. This power it possesses; but then association of itself can never account for the *origin* of a class of pleasures, different from all the others, of which we have any experience. If there were nothing originally and intrinsically beautiful, that is, if it were *not* so ordered by nature, that the mind should be filled with delightful feelings, whenever certain objects were presented to it, the associating principle, having no materials, on which it could operate, could not exist. Accordingly Mr. Alison himself, who attributes so much to association, is so sensible of this,

that he does not deny, that the mind, in consequence of its adaptation to objects around it, and of the objects to the mind, is by its very constitution susceptible of pleasing, and delightful, and sublime emotions, independently of the influence of custom and habit.

Admitting, therefore, that emotions of beauty are modified by circumstances, and that, consequently, very much may justly be attributed to association, it will, nevertheless, hold true, that certain objects can never be presented to the mind, and the mind be unmoved; in other words, emotions of beauty will necessarily exist, whenever certain objects are before the mind, until its laws are altered.—We proceed, then, to inquire, What objects, whether bodies of matter, sounds, colours, or whatever causes the emotion in question, are intrinsically beautiful;—That is to say, we inquire what objects produce, or are antecedent to emotions of beauty of themselves, independently of custom or association.

§. 286. *Remarks on the beauty of forms.*

In making that selection of those objects, which we suppose to be fitted, in the original constitution of things, to cause within us pleasing emotions, independently of the aid of association, we cannot profess to speak with certainty. The appeal is to the general experience of men; and all we can do, is, to give, so far as it seems to have been ascertained, the results of that experience. Beginning, therefore, with material objects, we are justified by general experience in saying, that certain dispositions or forms of matter are beautiful;—for instance, the CIRCLE.

We rarely look upon a winding or serpentine form, without experiencing a feeling of pleasure; and on seeing a circle, this pleasure is heightened. Hence Hogarth in his *Analysis of Beauty*, expressly lays it down, that those lines, which have most variety in themselves, contribute most towards the production of beauty, and that the most beautiful line, by which a surface can be bounded, is the waving or serpentine, or that which constantly, but imperceptibly deviates from the straight line. This, which we frequently

find in shells, flowers, and other pleasing natural productions, he calls the line of beauty. Now, we admit, that the circle, and all winding forms may have more or less of beauty in consequence of associated qualities; no doubt, the greater part of their beauty may be attributed to this cause; still there is very great reason to believe, that a pleasing emotion, although it may be in general a slight one, is excited by these forms, independently of any association whatever.

For the same reasons, we are to suppose, that a square figure has intrinsically some beauty, although less than the circle. What the cause of the difference is, it is somewhat difficult to say, unless it be, that a circle being more simple, makes a more direct and entire impression; whereas the attention is divided among the sides and angles of a square.

§. 287. *Of the original beauty of colours.*

We experience what may be termed an original emotion, which is pleasing, in beholding colours. This is observed in all children; and sometimes when the objects are brilliant, and the colours are various, the emotion of pleasure is intense. It is found to be the same universally among savages; and also, but in a less degree, among the uneducated classes in civilized communities. In persons of refinement, the original tendency to receive pleasing emotions from the contemplation of brilliant colours seems to have, in a measure, lost its power, in consequence of the developement of tendencies, to receive pleasure from other causes. (See, in connection with this section, Transactions of Royal Society of Edin. P. I. Vol. VII. p. 7.)

§. 288. *Of emotions of beauty from sounds.*

There are feelings arising on other occasions, to which we apply the phrase, EMOTIONS OF BEAUTY, which favour the supposition, that the mind is so constituted, as to be naturally and originally susceptible of receiving from some objects that pleasure, which is a constituent part of what-

ever is termed beautiful. We refer to the emotions, produced on hearing sounds.—It is true, that, in different nations, we find different casts or styles of musick; but, notwithstanding this, certain successions of sounds, viz. those, which have certain mathematical proportions in their times of vibration, are alone pleasing. As, therefore, not all series of sounds are beautiful, but only those of a particular character, and these are every where found to excite emotions of beauty without exception; the presumption is, that beauty, in other cases, is not wholly contingent, but is partly original, although the greater portion may arise from the principles of association.

§. 289. *Of motion as an element of beauty.*

Motion has sometimes been reckoned as an element of beauty; but not every kind of motion. The motion of a winding river gives us pleasure, and also of a ship at sea. We look on, and are pleased without being able to control our feelings, or to tell, why they exist. With what pleasing satisfaction, we gaze upon a column of smoke, ascending from a cottage in a wood! And what a feeling of pleasure arises on beholding a horse, that is freed from the subjection of the bit, moving at full speed over a plain!—It may be said, we are aware, that the pleasure arising from beholding the ascending smoke of the cottage, is caused by the favourite suggestions, which are connected with it, of rural seclusion, peace, and abundance. But the pleasure would be essentially the same, if it were known to ascend from the uncomfortable wigwam of the savage, or the fires of a wandering horde of gypsies.

But there are some kinds of motion, for instance, whenever it is accelerated beyond a certain degree of swiftness, which cannot be said to be beautiful, but which, on the contrary, cause painful feelings.

§. 290. *Of the beauty of certain natural signs.*

There are certain signs, expressive of feelings and of character, with which nature has furnished us. There is

some reason to believe, that these signs may excite emotions, and may possess their appropriate meaning, independently of experience. They cannot, indeed, all of them be said to be beautiful; for instance, the frown, which is indicative of reproof and of the angry passions. But the smiling countenance gives pleasure, not only to persons grown up, but to the infant in the cradle; and, therefore, seems not only to have been furnished, but to have been *appointed* by nature as the sign of placid or of joyful emotions, and not less fitted to excite corresponding emotions in others. The emotion of pleasure, which the infant exhibits, on seeing a smiling countenance, cannot, with any degree of probability, be ascribed to experience. A supposition of that kind, to say the least, can never admit of such positive evidence, as to entitle it to much weight. And when in connection with its improbability, we consider, that associated feelings themselves, to which so much is justly attributed, cannot exist, without something, with which to begin, and on which to fasten, it can hardly be regarded, as unphilosophical, to ascribe the feelings, of which we are now speaking to something original and permanent in our constitution.

§. 291. *Of the beauty of moral actions.*

The views, which have been taken, will be found to hold good of those pleasurable emotions, which arise, whenever we contemplate moral actions of a praiseworthy kind. If those theories, which deny an original susceptibility of moral emotions, and make all our moral judgments the result of experience and some sort of calculation, were true; then we might expect to find the perception of moral beauty perfect in mature age, but hardly having an existence in youth and childhood. But this is not the fact.

The child, that successively exults and weeps at the narrations of the ballad, has something within him, which most decisively pronounces upon the character of those actions, which he is thus made acquainted with. He sympathizes with those, who are in suffering; he admires the virtuous; he abhors the unprincipled and the villain.

His moral susceptibility, to say the least, is equally quick with that of persons grown up in all cases, except in those instances, where he is not so well able, as persons of mature minds, to see the full consequences of actions.

§. 292. *Of a distinct sense or faculty of beauty.*

From the views, which have been taken, it might be conjectured, that we adopt the opinion of those, who have held, that there is a distinct *sense* or faculty of beauty. There have been some writers, among whom Mr. Alison has included Hogarth and Winkelman, who have supposed, that all emotions of beauty and sublimity are to be referred to a distinct sense ; and, consequently, that all qualities, which are in general antecedent to those emotions, are the established and appropriate objects of that supposed sense. By means of this sense or faculty of beauty, which seems to have been regarded as entirely analogous to the external senses of sight and feeling, the mind experiences the emotion of beauty constantly, or almost constantly, whenever a particular object is present. That is, having this supposed sense, we can no more be without the appropriate emotion, whenever the beautiful object is presented, than we can be without sight or feeling, when our eyes are open, to behold objects, or when our hands are impressed upon them. And, moreover, the beauty, which is thus discovered, has, according to this system, a precise and definite character, concerning which there cannot ordinarily be any possible mistake.

There are some parts, undoubtedly, of this doctrine of emotions of beauty, to which it is, by no means, necessary to object. Its advocates hold, with good reason, that certain objects give us pleasure of themselves ; and also that the emotions arise in the mind at once, whenever the objects are presented to it, and, therefore, much the same, as when vision follows the opening of the eyelids. But here, it cannot be denied, that the analogy between the susceptibility of emotions of beauty, and the external senses, ceases.

The opinion, that we have a distinct sense or faculty of beauty, would give to its appropriate emotions a character more exact and particular, than is justified by what is known to be the fact ; there would in this case be no more difference of opinion concerning the beauty and deformity of objects, than concerning their sensible qualities, their taste, sound, or colour. If this doctrine, taken in its full extent, were true, the peasant, who can tell, whether the taste of the apple be sweet or sour, and whether the colour of the clouds of heaven be bright or dark, can sit in judgment on the beauty of the works of nature and art, no less than persons of the most critical taste.—While, therefore, we contend, that there is in the mind an original susceptibility of emotions of beauty, it is to be regarded as something quite different in its nature from the external senses ; and these emotions, therefore, unlike our sensations, will differ, in kind and degree, with a variety of circumstances.

§. 293. *Objects may become beautiful by association merely.*

While some of the firms, of which matter is susceptible, are pleasing of themselves and originally, while we are unable to behold bright colours, and to listen to certain sounds, and to gaze upon particular expressions of the countenance, and to behold praiseworthy actions, without emotions, in a greater or less degree, delightful ; it must be admitted, that, in the course of our experience, we find a variety of objects, that seem, as they are presented to us to be unattended with any emotion ; objects, that are perfectly indifferent. And yet these objects, however wanting in beauty to the great mass of men, are found to be invested, in the minds of some, with a charm, allowedly not their own.

These objects, which previously excited no feelings of beauty, may become beautiful to us in consequence of the associations, which we attach to them. That is to say, when the objects are beheld, certain former pleasing feelings, peculiar to ourselves, are recalled.

The lustre of a spring morning, the radiance of a summer evening may of themselves excite in us, a pleasing emotion ; but, as our busy imagination, taking advantage of the images of delight, which are before us, is ever at work and constantly forming new images, there is, in combination with the original emotion of beauty, a superadded delight. And if in these instances, only a part of the beauty is to be ascribed to association, there are some others, where the whole is to be considered, as derived from that source.

Numerous instances can be given of the power of association, not only in heightening the actual charms of objects, but in spreading a sort of delegated lustre around those, that were entirely uninteresting before. Why does yon decaying house appear beautiful to me, which is indifferent to another—And why are the desolate fields around it clothed with delight, while others see in them nothing, that is pleasant? It is, because that house formerly detained me, as one of its inmates, at its fire-side, and those fields were the scenes of many youthful sports. When I now behold them, after so long a time, the joyous emotions, which the remembrances of my early days call up within me, are, by the power of association, thrown around those objects, which are the cause of the remembrances.

§. 294. *Further illustrations of associated feelings.*

He, who travels through a well-cultivated country town, cannot but be pleased with the various objects, which he beholds ; the neat and comfortable dwellings ; the meadows, that are peopled with flocks, and with herds of cattle ; the fields of grain, intermingled with reaches of thick and dark forest. The whole scene is a beautiful one ; the emotion we suppose to be partly original ; a person, on being restored to sight by couching for the cataract, and having had no opportunity to form associations with it, would witness it, for the first time, with delight. But a greater part of the pleasure is owing to the associated feel-

ings, which arise, on beholding such a scene ; these dwellings are the abode of man ; these fields are the place of his labours, and amply reward him for his toil ; here are contentment, the interchange of heartfelt joys, and "ancient truth."

Those, who have travelled over places, that have been signalized by memorable events, will not suspect us of attributing two great a share of our emotions to association. It is true, that in a country so new as America, we are unable to point so frequently, as an European might do, to places, that have witnessed the gallantry and patriotism of ancient times. But there are some such consecrated spots. With whatever emotions the traveller may pass up the banks of the Hudson, he cannot but find his feelings much more deeply arrested at Stillwater and at Saratoga, the scenes of the memorable battles of Sept. 19, and Oct. 7, 1777, and of the surrender of Burgoyne, than at any other place. It was there, that brave men died ; it was there, that an infant people threw defiance at a powerful enemy, and gave sanguinary proof of their determination to be free. A thousand recollections have gathered upon such places, and the heart overflows with feeling at beholding them.

The powerful feeling, which here exists, whether we call it an emotion of beauty, or sublimity, or give it a name, expressive of some intermediate grade, is essentially the same, with that, which is caused in the bosom of the traveller, when he looks for the first time upon the hills of the city of Rome. There are other cities of greater extent, and washed by nobler rivers, than the one, which is before him ; but upon no others has he ever gazed with such intensity of feeling. He beholds what was once the mistress of the world ; he looks upon the ancient dwelling place of Brutus, of Cicero, and of the Cæsars. The imagination is at once peopled with whatever was noble in the character, and great in the achievements of that extraordinary nation ; and there is a strength, a fulness of emotion, which, without these stirring remembrances, would be very sensibly diminished.

§. 295. *Instances of national associations.*

The influence of association in rousing up, and in giving strength to particular classes of emotions, may be strikingly seen in some national instances.—Every country has its favourite tunes. These excite a much stronger feeling in the native inhabitants, than in strangers. The effect on the Swiss soldiers of the *Ranz des Vaches*, their national air, whenever they have happened to hear it in foreign lands, has often been mentioned. So great was this effect, that it was found necessary in France to forbid its being played in the Swiss corps in the employ of the French government. The powerful effect of this song cannot be supposed to be owing to any peculiar merits in the composition; but to the pleasing recollections, which it ever vividly brings up in the minds of the Swiss, of mountain life, of freedom, and domestick pleasures.

The English have a popular tune, called *Belleisle March*. Its popularity is said to have been owing to the circumstance, that it was played when the English army marched into Belleisle, and to its consequent association with remembrances of war and of conquest. And it will be found true of all national airs, that they have a charm for the natives of the country, in consequence of the recollections connected with them, which they do not possess for the inhabitants of other countries.

We have abundant illustrations of the same fact in respect to colours. The purple colour has acquired an expression or character of dignity, in consequence of having been the common colour of the dress of kings; among the Chinese, however, yellow is the most dignified colour, and evidently for no other reason, than because yellow is that, which is allotted to the royal family. In many countries, black is expressive of gravity, and is used particularly in seasons of distress and mourning; and white is a cheerful colour. But among the Chinese white is gloomy, because it is the dress of mourners; and in Spain and among the Venetians black has a cheerful expression, in consequence of being worn by the great. So that the remark of Sir Joshua

Reynolds has some foundation, that custom makes, in a certain sense, white black, and black white.—“It is custom alone, (says he,) determines our preference of the colour of the Europeans to the Ethiopians, and they, for the same reason, prefer their own colour to ours. I suppose no body will doubt, if one of their painters were to paint the goddess of beauty, but that he would represent her black, with thick lips, flat nose, and woolly hair; and it seems to me, he would act very unnaturally, if he did not.” (The Idler, No. 82.)

§. 296. *Of utility as an element of beauty.*

Some theorists, among others Mr. Hume, have imagined, that they were able to discover the origin or foundation of all emotions of beauty in the perception of utility; understanding by the term a fitness or adaptation of the beautiful objects to some important purpose. We certainly contemplate this quality with a degree of complacency and approbation. Many objects, when their use or adaptation to some purpose became known to us, have at once been clothed with an interest, which they did not before possess. A share, therefore, of our emotions of beauty may be traced to this source. But when the perception of utility or fitness is proposed, as the ground and origin of all of them, the doctrine evidently cannot be sustained. If this principle hold universally, it is considered a fair inference from it by Mr. Burke, that the wedge-like snout of the swine, with its tough cartilage at the end, and the general make of its head, so well adapted to digging and rooting, are extremely beautiful; and that hedge-hogs and porcupines, which are so admirably secured against all assaults by their prickly hides, can justly be considered creatures of no small elegance.

On the theory, therefore, which proposes the perception of utility, as the true ground of all emotions of beauty, it is enough for us to say, that it goes too far;—it does, indeed, in connection with the laws of association, suggest a happy explanation of many pleasing emotions, but, by no

means, of all. The inferences of Burke in opposition to it are not without foundation. (See Burke on the Sublime and Beautiful, P. III. Sect. 6.)

§. 297. *Of proportion as a cause or element of beauty.*

There are some, who imagine, they find the source of beauty in a certain symmetry and determinate proportion of parts. This idea has been particularly advocated by artists, who seem to have supposed, that the elements of beauty might not only be discovered, but even measured in the great models of statuary and painting. Mr. Burke has examined this opinion also; directing his inquiries to vegetables, the inferior animals, and man. He has shown, that, in all these cases, there are no certain measures, on which the beautiful can justly be said to depend.—For instance, in the vegetable creation we find nothing more beautiful than flowers, but there is a very great variety in their shape, and in the disposition of the parts, which pertain to them. In the rose the stalk is slender, but the flower is large. The flower or blossom of the apple, on the other hand, is very small, but the tree large. Now if one of these be in proportion, the other wants it; and yet, by general consent, both the rose and the apple-blossom possess beauty, and the bush of the one and the tree of the other allowedly present a very engaging appearance.—If again we inquire in respect to man, or the inferior animal creation, we are brought to the same result, viz. that beauty does not depend upon a fixed relative size of the parts, that is, upon proportion.—Those, who deem it important to amuse themselves with every thing, that has been advanced on the subject, and find time for such minuteness of inquiry, may meet with various other theories of more or less value, and probably none of them, however unphilosophical, without some worth.

§. 298. *Differences of original susceptibility of this emotion.*

Supposing it to be true, that we possess an original susceptibility of emotions of beauty, independently of

custom, and of considerations of utility and proportion, it seems, however, to be the fact, that this susceptibility is found existing in different degrees in different persons. Let the same beautiful objects be presented to two persons, and one will be found to be not only affected, but ravished, as it were, with feelings of beauty; while the other will have the same kind of emotions, but in a very diminished degree.—A great degree of susceptibility of emotions of beauty is usually termed *SENSIBILITY*.—The differences of men in this respect may justly be thought, where we cannot account for it by any thing in their education or mental culture, to be constitutional. Nor is it more strange, that men should be differently affected by the same beautiful objects in consequence of some difference of constitution, than that they should constitutionally have different passions, that one should be choleric, another of a peaceable turn, that one should be mild and yielding, another inflexible.

§. 299. *Generalizations of emotions of beauty.*

It is a well founded opinion, and worthy of some consideration, that there may be a species of generalization of our emotions, as well as of our other intellectual states; there may be classes of feelings, as well as classes of perceptions, or of objects.—The ordinary process of generalizing, which precedes the giving of common names, has already been explained. A general or common name is one, which is employed as expressive of a general notion or feeling of resemblance, existing in a number of particulars; thus, horse, quadruped, animal, peace, pleasure, happiness, are names of this kind. In all languages, there are many general terms; but they are much less in number, than the states of mind, which are general. For instance, we apply the word, *happiness*, to many states of mind, in which there would be found, if we were to make them the subjects of particular examination, no small difference in the degree of the delightful emotion. And, consequently, one general name is given to feelings, which might be arranged as different classes or species.

We have notions of various degrees of beauty, as well as of happiness; but, although these notions, (that is to say, different degrees of beauty, which are fully ascertained and settled upon,) are truly mental generalizations, we fail, in both cases, in having appropriate names for all of them. The word, *BEAUTY*, is made to stand, therefore, in consequence of the imperfection of language for a number of different degrees of delightful emotion; that is, for various feelings, which might be separated into species; and, therefore, be entitled to general names. As we have no names, allotted to many of these classes or generalizations of emotions, we cannot, as we are able to in other cases, call up the emotions, by merely seeing or hearing the name. But, although we do not have them embodied in words, we find, that they are capable of being suggested by particular objects, as if they were so embodied; and that thus, the objects, by which they are so suggested, are made to answer, in some measure, the place of language.

§. 300. *Manner of forming such generalizations, &c.*

We form our general notions of the beautiful in the same way as we form other general ideas, to which we alluded in the preceding section, viz. by the observation and comparison of many particulars. The emotions, therefore, will arise in the mind on all occasions, when the particulars, observed at the present moment, correspond with the particulars, which have been before observed.

It is one excellence of these generalized emotions, that being formed on the experience of many, and corrected by such general experience, they possess an uniformity and permanency, which could not be expected in those, which are formed from the experiences of an individual merely.

And, hence, the person, who has furnished his mind with them, is capable of anticipating and predicting much more than any others, what objects will arouse emotions of beauty in the great mass of people;—and his anticipations and foresight will be the more correct, in proportion as his inductions have been more wide and careful.

But then it is not to be inferred, that these general notions are all, that is present to the mind, when beautiful objects are before it. In general, the imagination is at such times much quickened; trains of distinct images can hardly fail to be called up; these images are accompanied with lively emotions; and, in this way, the emotion of beauty, which we feel as particularly appropriate to any object, may be either very much strengthened, or very much diminished by the incorporation with it of feelings from various other sources.—The feelings of beauty, which we have from this last source, are comparatively slow in arising, and are constantly varying; whereas the suggestion of any generalized emotions of beauty is commonly instantaneous; and they are also of a more permanent character.

§. 30¹. *Emotions of beauty compared with others.*

We stop here to notice one of the objections, which may occur to these views of this subject. Supposing, as we do, that the mind has originally certain tendencies to emotions of beauty, we admit the power of various circumstances in modifying, and, in some cases, of overcoming such original tendencies. Nor in point of fact, can it be denied, that the character of our feelings of beauty frequently changes; that is, what is regarded by us, as beautiful at one time, is not at another; what is beautiful in the eyes of one age or of one nation, loses its lustre in the view of another.—The objection is, that such changes of feeling in regard to the beautiful are inconsistent with an original susceptibility of such emotions.—The answer to be given is, that we experience analogous variations in all our emotions of whatever kind, as well as those of beauty.—Take, for instance, that feeling by which we are led to regard any thing as true or false. It will surely be admitted, that there is in the mind an original tendency to assent to certain propositions, rather than others of an opposite kind. It cannot be supposed, that the characteristic of mind, which leads us to regard one thing as true, and

another as false, is something, which is wholly superinduced,—the result merely of accidental circumstances.—And yet it is well known, that our views of subjects continually alter; those objects, which appeared just, and worthy, and desirable in youth, have a different appearance in manhood, and again have a different aspect in old age. And the fluctuations of opinion, which are found in individuals, may also be clearly traced in the moral, political, and religious history of different ages and nations.—We find the same tendency to perpetual fluctuations in all our emotions, in the feelings of cheerfulness and melancholy, of desire and aversion, of love and hatred, &c.

§. 302. *Summary of views in regard to the beautiful.*

As the subject of emotions of beauty is one of no small difficulty, it may be of advantage to give here a brief summary of some of the prominent views in respect to it.—

(1) Of emotions of beauty it is difficult to give a definition, but we notice in them two marks or characteristic;—They imply, 1st, a degree of pleasure, and 2dly, are always referred by us to the external object.—(2) No objects are beautiful of themselves, and independently of the soul, which contemplates them; but appear to have a degree of splendour or beauty in consequence of our having associated with them, constantly, and from a very early period, the feelings, which exist in our own minds.

(3) The feeling, which we term an emotion of beauty, is not limited to natural scenery, but may be caused by works of art, by creations of the imagination, by the severest efforts of reasoning, and by moral actions. On all these the mind may reflect back the lustre of its own emotions, and make them beam out with a sort of splendour, which is not originally in the objects; and this is done in the same manner, as when we diffuse our sensations of colour, which are merely affections of the mind, over the objects, which we call red, white, yellow, &c.—(4) There is in the mind an original susceptibility of emotions in general,

and, consequently, of those of beauty ; and not only this, some objects are found, in the constitution of things, to be followed by these feelings of beauty, while others are not ; —and such objects are spoken of as being originally or intrinsically beautiful. That is, when the object is presented to the mind it is of itself followed by emotions of beauty, without being aided by the influence of accessory and contingent circumstances.

(5) Without pretending to certainty in fixing upon those objects, to which, what is termed original or intrinsick beauty may be ascribed, there appears to be no small reason, in attributing it to certain forms, to sounds of a particular character, to bright colours, to certain expressions of the countenance, and to praiseworthy actions. —The whole amount, however, of the feeling of beauty, arising from this source, is comparatively small. —(6) Many objects, which cannot be considered beautiful of themselves, become such, by being associated with a variety of former pleasing and enlivening recollections; and such, as possess intrinsick beauty, may augment the pleasing emotion from the same cause. Also much of the difference of opinion, which exists as to what objects are beautiful, and what are not, is to be ascribed to association. —These are some of the prominent views in this discussion ; others are, in a measure, subordinate, but are not without interest and importance.

§. 303. *Of picturesque beauty.*

We apply the term PICTURESQUE to whatever objects cause in us emotions of beauty, in which the beauty does not consist in a single circumstance by itself, but in a considerable number, in a happy state of combination. The meaning of the term is analogous to the signification of some others of a like termination, which are derived to us from the Italian through the medium of the French. Mr. Stewart remarks of the word, *arabesque*, that it expresses something in the style of the Arabians ; *moresque*, something, in the style of the Moors ; and

grotesque, something which bears a resemblance to certain whimsical delineations in a grotto or subterranean apartment at Rome. In like manner, *picturesque*, originally implies what is done in the style and spirit of a painter, who ordinarily places before us an object made up of a number of circumstances, in such a state of combination, as to give pleasure.

The epithet may be applied to paintings, to natural scenery, poetical descriptions, &c.—The following description from Thompson, which assembles together some of the circumstances, attending the cold, frosty nights of winter, is highly picturesque.

"Loud rings the frozen earth and hard reflects
"A double noise ; while at his evening watch,
"The village dog deters the nightly thief ;
"The heifer lows ; the distant waterfall
"Swells in the breeze ; and with the hasty tread
"Of traveller, the hollow-sounding plain
"Shakes from afar."—————

CHAPTER TWENTY FOURTH.

EMOTIONS OF SUBLIMITY.

§. 304. *Connection between beauty and sublimity.*

Those emotions, which we designate as **SUBLIME**, are a class of feelings, which have much in common with emotions of beauty; they do not differ so much in nature or kind, as in degree. When we examine the feelings, which go under these two designations, we readily perceive, that they have a progression; that there are numerous degrees in point of intensity; but the emotion, although more vivid in one case than the other, and mingled with some foreign elements, is for the most part, essentially the same. So that it is, by no means, impossible to trace a connection even between the fainter feelings of beauty, and the most overwhelming emotions of the sublime.

This progression of our feelings from one, that is gentle and pleasant to one, that is powerful and even painful, has been happily illustrated in the case of a person, who is supposed to behold a river at its first rise in the mountains, and to follow it, as it winds and enlarges in the subjacent plains, and to behold it at last losing itself in the expanse of the ocean. For a time the feelings, which are excited within him, as he gazes on the prospect, are what are termed emotions of beauty. As the small stream, which had hitherto played in the uplands and amid foliage, that almost hid it from his view, increases its waters, separates its banks to a great distance from each other, and becomes the majestic river; his feelings are of a more powerful kind. We often, by way of distinction, speak of the feelings existing under such circumstances, as emotions of grandeur. At last it expands and disappears in the immensity of the ocean; the vast illimitable world of billows flashes in his sight;—the emotion then, widening and strengthening with the magnitude and energy of the ob-

jects, which accompany it, becomes sublime.—Emotions of sublimity, therefore, chiefly differ, at least in most instances, from those of beauty in being more vivid and powerful.

§. 305. *Of sublimity a parte rei.*

There is neither beauty nor sublimity *a parte rei*, using a phrase, which has come down to us from the Schools. In saying, there is no sublimity of this sort, we mean, there is no sublimity, which has a permanent and unchangeable existence in all sublime objects, independently of the emotions, which we feel in the contemplation of them. Of those, who hold to the doctrine of a sublime of this description, the opinions are various; although they all maintain, that sublimity is a quality existing alike in all objects, capable of producing the emotion, they are not agreed as to what that particular quality is. According to one, it is the terrible; another makes it consist in the exertion of mighty power; according to a third, it is great altitude or vast extent.—We cannot agree, that there is any abstract sublimity of this kind. When we rightly consider the words, SUBLIMITY, and THE SUBLIME, we shall regard them as merely common names, expressive of a certain character or trait in our emotions, and nothing more. And of course they are applied to all those emotions, however they may differ in some other respects, in which that distinctive characteristick is found. The characteristick, to which we refer, is by no means easy of definition; although it is generally understood to imply great vividness and strength.

§. 306. *Occasions of emotions of sublimity.*

It will aid in the better understanding of this subject briefly to mention some of the occasions, on which the feeling of sublimity arises.—Among other occasions, this emotion is found to exist, whenever it happens, that we have our attention called to objects of vast extent. Accordingly, mountains of great altitude, the celestial vault, when seen from high summits, vast plains, beheld from a commanding position, the ocean, &c. affect us with sublime emotions.

There is the same result in the contemplation of all objects, which indicate great exertions of power; even when we have but very confused notions of that energy, which we know to be somehow put forth. Nothing can be more sublime, than a volcano, throwing out from its bosom, clouds, and burning stones, and immense rivers of lava. The ocean, greatly agitated with a storm, and tossing the largest navies, as if in sport, possesses an increase of sublimity, on account of the more striking indications of power, which it at such a time gives. The shock of large armies also is sublime. But in these instances, as in most others, the sublime emotion cannot be ascribed solely to one cause; something is to be attributed to vast extent; something to the original effect of the brilliancy or darkness of colours; and something to feelings of dread and danger.

We often experience emotions of sublimity in witnessing objects, that move with very great swiftness. This is one source of the feelings, which we have, at beholding bodies of water rushing violently down a cataract. For the same reason, the hurricane, that hastens onward with irresistible velocity, and lays waste whatever it meets, is sublime. And here also we find a cause of part of that sublime emotion, which we feel on seeing at a distance the electric fluid, darting from the cloud to the earth.

§. 307. *Sublimity in actions or moral sublime.*

This emotion is found also to accompany certain actions of men; and here we find instances of what is termed MORAL SUBLIME.—We in general regard those human actions as sublime, which are not only praiseworthy; but which are put forth under such circumstances, as very strongly to excite our feelings. So that we here also see the progression from the beautiful to the sublime, the same as in the beautiful and sublime of the natural world. The benevolent man is a pleasing or beautiful object, but when in the pains and agonies of death, he requests with his dying breath, that the poor may be fed from his substance,

the exercise of benevolence under such circumstances strongly excites our feelings, and becomes an instance of the moral sublime.

Whenever we look abroad upon men, and witness the trait of unconquerable fortitude, whenever we behold great self-possession in sudden and fearful emergencies, or see a readiness to share voluntarily in another's sufferings, or become acquainted with other moral exercises of a like kind, we cannot but experience a strong emotion. It is not easy to communicate an exact notion of this feeling, except perhaps in the circumstance of its great strength. It is evident, however, that it is closely analogous to that agitation and expansion of the soul, which exists, when we contemplate what is vast, and terrible, and mighty in nature.

§. 308. *No objects sublime of themselves.*

But objects are not sublime, any more than they are beautiful in themselves; in both cases, it is the mind of man and that alone, which gives them the sublimity, they seem to possess of their own nature. The hurricane, the cataract, the lightning, when resolved into their elements, are only a number of contiguous atoms. And yet it seems to be unalterably fixed in the constitution of things, that we cannot behold them without strong feeling. The emotions, which we feel, are diffused by us over the objects, that are their cause, or more properly are antecedent to them; and this diffusion will be found to be all, that constitutes their sublimity.—There is a similar diffusion of our own emotions over objects of our contemplation, that are instances of the moral sublime.

§. 309. *Sublime objects have some elements of beauty.*

We have seen, that a regular progression may, in most instances, be traced from the beautiful to the sublime. It seems, therefore, to follow, that instances of the sublime will, on removal of some circumstances, possess more or less of the beautiful. And this, on examination, will be

found to be generally the case. Take, as an example, the shock of powerful armies, which is confessedly a sublime scene. We have only to remove the circumstance of slaughter; and at once the regular order of the troops, their splendid dress, and rapid movements, together with the floating of banners and the sound of musick, are exceedingly picturesque and beautiful; nothing more so. And all this is none the less beautiful, when thousands are falling and dying in actual contest; although the painful emotion, consequent on witnessing a scene of slaughter, so much overpowers the sense of the beautiful, that it appears even not to have an existence. If the engagement between the armies should be without the accompaniments of military dress, and without order, and without strains of musick, but a mere struggle between man and man, with such arms as came readiest into their power, the scene, however destructive, would be any thing, rather than sublime.—Diminish the force of the whirlwind to that of the gentle breeze, and as it playfully sweeps by us, we feel that emotion of pleasure, which is an element of the beautiful. And so when the mighty cataract is dwindled down to the cascade, we shall discover, that the tumultuous emotions of the sublime are converted into the gentler feelings of beauty. The same effect will be found to follow the moral sublime.

But it will be asked, was there any thing of moral beauty in Marius, the blood-thirsty Roman chief?—And yet when we see him sheltered amid the ruins of Carthage, fallen from his greatness, but retaining the unconquerable will, there is something in it of sublimity. In reply it may be said, that when we experience in this instance the moral sublime, we fix our attention upon a particular trait of character; and do not wander over the whole life of the man. The trait here is fortitude; and, consequently, we may discover in this, and in all similar instances, gradations of emotion. Whenever we see an individual cheerful, and happy, and composed in ordinary difficulties and pressures, such an individual is undoubtedly an object of moral beauty. But let these misfortunes be increased,

let him be driven from home and country, let the world, as it were, be combined against him, and the man, who, in such circumstances, betrays no diminution of fortitude, but holds up an unshaken stability of soul amid the blackness of the desolations around him, is a sublime object. We shall feel the emotion, whatever may be his character, because our attention is fixed not upon the whole man, but upon a particular trait; and that trait will be found, when exhibited in a less striking degree, to be a beautiful one.

However true it may be, as a general statement, that sublimity implies some elements of the beautiful, it is not necessary to assert, that this is *always* the case. Perhaps in some instances it is not. A tract of barren heath or of sand, which certainly cannot possess much, if any beauty, may, when spread abroad before us to great extent have a considerable degree of the sublime. The statement given is meant as a general one, admitting certainly of but few exceptions.

§. 310. *Of emotions of grandeur.*

For all the various emotions, of which we are now speaking, as they rise from the lowest to the highest, we have the two general terms, *BEAUTY*, and *SUBLIMITY*. There is, however, another form of expression, which is, with some good reason, putting forth its claims to be received into use; viz. *emotions of grandeur*. We may happily apply this phraseology to various objects, which we hardly know, whether to class with the beautiful or sublime; having too much of fullness and expansiveness for the former, and too little of power for the latter. The meandering river is beautiful; as it becomes deeper and wider, it assumes an appearance not of beauty, but of grandeur; but the ocean only is more than either, is sublime.

§. 311. *Of original or intrinsic sublimity of objects.*

If there be a connection between the beautiful and sublime, if beauty, grandeur, and sublimity are only names for various emotions, not so much differing in kind, as in degree; essentially the same views, which were advanced

in respect to beauty, will hold here. It will follow, that if the contemplation of some objects is attended with emotions of beauty, independently of associated feelings; or, in other words, if they have an intrinsic beauty, that there are objects also intrinsically sublime. Hence we may conclude, that whatever has great height, or great depth, or vast extent, or other attributes of the sublime, will be able to excite in us emotions of sublimity of themselves, independently of aid from any connected feelings. We have much ground for regarding this as a correct supposition; and still a great part of the sublime emotion is to be attributed to association.

§. 312. *Influence of association on emotions of sublimity.*

The remark, that a great part of the sublime is to be attributed to association, admits of an illustration in the case of sounds. When a sound suggests ideas of danger, as the report of artillery, and the howling of a storm; when it calls up recollections of mighty power, as the fall of a cataract, and the rumbling of an earthquake, the emotion of sublimity, which we feel, is greatly increased by such suggestions. Few simple sounds are thought to have more of sublimity, than the report of a cannon; but how different, how much greater the strength of feeling, than on other occasions, whenever we hear it coming to us from the fields of actual conflict! Many sounds, which are in themselves inconsiderable, and are not much different from many others, to which we do not attach the character of sublimity, become highly sublime by association. There is frequently a low feeble sound, preceding the coming of a storm, which has this character.

" Along the woods, along the moorish fens,

" Sighs the sad genius of the coming storm,

" Resounding long in fancy's listening ear.

Thompson's Winter.

It is sometimes the case, that people, whose sensibilities are much alive to thunder, mistake for it some common sounds, such as the noise of a carriage, or the rumbling of a cart. While they are under this mistake, they feel these sounds as sublime; because they associate with them all

those ideas of danger and of mighty power, which they customarily associate with thunder. The hoot of the owl at midnight is sublime chiefly by association; also the scream of the eagle, heard amid rocks and deserts. The latter is particularly expressive of fierce and lonely independence; and both are connected in our remembrances with some striking poetical passages.—The same results will be found to hold in other cases. A view of the Egyptian pyramids animates us with sublime emotions; it is impossible to behold such vast efforts of human power, and be unmoved; but the strength of these feelings is increased by means of the solemn recollection, that they have stood unshaken, while successive generations have flourished and perished at their feet, and by their being connected with many ideas of ancient magnificence, of unknown kings, and with numerous incidents in the history of a people, once famous for opulence and the arts, but now no longer an independent nation. Mount Sinai in Arabia Petrea is a rocky pile of considerable altitude, and like other summits must have always excited some emotion in those, who beheld it; but when it is seen by a christian traveller, the sublime emotion is greatly increased by the recollection of the important place, which this summit holds in the history of the Jews, and of its consequent connection with the belief and the hopes of all those, who embrace the religion of the Saviour.

NOTE. The subject of emotions of beauty and sublimity has justly been regarded as one of no small difficulty. A great variety of opinions have been advanced; and many of them confused and contradictory. It would be unwise, therefore, to recommend the reading of every thing, which has been written on the subject; which would tend rather to perplex, than enlighten the mind. The views which have been given, are essentially those, which are illustrated and supported in Brown's Lectures on the Mind; they are here given in a condensed form. There are also many interesting and philosophical illustrations in Alison's Nature and Principles of Taste, and in Burke's Inquiry into the Sublime and Beautiful.

CHAPTER TWENTY FIFTH.

OF IMAGINATION.

§. 313. *Definition of the power of imagination.*

IMAGINATION is a complex exercise of the mind, by means of which various conceptions are combined together, so as to form new wholes. The conceptions have properly enough been regarded as the materials, from which the new creations are made; but it is not until after the existence of those mental states, which are implied in imagination, that they are fixed upon, detained, and brought out from their state of singleness into happy and beautiful combinations.

Our conceptions have been compared to shapeless stones, as they exist in the quarry, which "require little more than mechanick labour to convert them into common dwellings, but that rise into palaces and temples only at the command of architectural genius." That rude, and little more than mechanick effort, which converts the shapeless stones of the quarry into common dwellings, may justly be considered, when divested of its metaphorical aspect, a correct representation of this mental property, as it exists among the great mass of mankind; while the architectural genius, which creates palaces and temples, is the well-furnished and sublime imagination of poets, painters, orators, &c.

Imagination is a complex mental operation; implying the exercise of the power of association or simple suggestion in furnishing those conceptions, which are combined together; also the exercise of that susceptibility, by which we perceive the relations of things,—that is, of relative suggestion. Nor is this all, that is necessary, as will hereafter more fully appear.

§. 314. *The creations of imagination not entirely voluntary.*

The opinion, that even persons of the most ready imagination can form new imaginary creations, whenever they choose, by a mere volition, however widely it may have prevailed, cannot be maintained. To will, or to exercise a volition, always implies a mental determination, a choice. In accordance with the common opinion, we will suppose, that a person wills, or chooses, to imagine an ocean of melted brass, or an immense body of liquid matter, which has that appearance. The statement itself evidently involves a contradiction. It is certainly impossible for a person to will to imagine any thing, since that precise thing, which he wills to imagine, must already be in his mind at the time of such volition. He wills, for instance, to imagine a sea of melted brass; but of what meaning or what utility is this volition, when he has already imagined the very thing, which this language seems to anticipate as future? Whatever a person wills, or rather professes, to will to imagine, he has already imagined; and, consequently, there can be no such thing as entirely voluntary imaginations.

§. 315. *Of imaginations not attended with desire.*

The creations, which we form by means of the power of imagination are of two kinds, those attended with desire, and those which are not.—It is the latter kind, which we speak of in this section.—There is hardly any mind so wanting in intellectual wealth as not to find clusters of associated conceptions,—groups of images, often arising in itself. They seem to come upon us, as it were, unbidden; and to combine themselves in a variety of proportions, presenting new, and perhaps grotesque figures. But, although this varied presentation of floating imagery have the appearance of occupying the mind in an accidental manner, it all arises, and is regulated by the laws of simple suggestion. No image whatever occurs, which has not some connection with the state of the mind, which prece-

ded it. In using these expressions, however, we would not be understood to imply, by the connection asserted, any thing more than this, that one intellectual state, in certain given circumstances, follows another, agreeably to an original law or principle of our constitution established by its maker. But although we truly have here instances of the exercise of imagination, it is not of that higher and effective kind, which gives birth to the creations of poetry, and painting, and the other fine arts.

§. 316. *Of imaginations attended with desire.*

While there are some combinations, the result of imagination, which are formed without any accompanying emotion of desire, there are some, where desire, or intention of some sort, clearly exists. It is of cases of this last mentioned kind that we are accustomed to think, when with those intellectual susceptibilities and states, to which, considered conjointly, we give the name of imagination, we associate the idea of effective power or the ability to create. It is this frame of mind, which exists in every attempt at composition in prose and verse, where the subject admits of lively images and appeals to the passions.

It may assist us in understanding this species of imagination, if we endeavour to examine the intellectual operations of one, who has sat down to write, whether the intended production be of a poetick or other kind.

A person cannot ordinarily be supposed to sit down to write on any occasion whatever, without having some general idea of the subject to be written upon already in the mind. He, accordingly, commences the task before him with the expectation and the desire of developing the subject more or less fully, of giving to it not only a greater continuity and a better arrangement, but an increased interest in every respect. And it may be the case, that many circumstances, indirectly relative to the effort of composition, such as the anticipated approbation or disapprobation of the publick, have an affect greatly to fix and increase the emotion of interest or desire. All vivid emotions of

this kind, such as love, fear, and hatred, (with which desire, in reference to some of its qualities, may be classed,) possess a degree of permanency, which cannot be considered, as belonging to any mere conception. And, as, in the instance, which we are now considering, the emotion of desire or interest is intimately connected with the general conception of the subject before the mind, the effect of this connection is a communication of the permanency, originally belonging solely to the desire, to the general idea or outlines of the subject, which the writer is to discuss. The conception, therefore, of those outlines loses in this way the fleeting and ever-varying nature of other conceptions, and becomes fixed. The lineaments of the anticipated treatise remain in their length, breadth, and proportions, permanently held up to the writer's view.

Spontaneous conceptions continue, in the mean while, to arise in the mind, on the common principles of suggestion; but as the general outline of the subject remains fixed, they all have a greater or less relation to it. And partaking in some measure of the permanency of the outline, to which they have relation, the writer has an opportunity to approve some and to reject others, according as they impress him as being suitable or unsuitable to the nature of the subject. Those, which affect him with emotions of pleasure, on account of their perceived fitness for the subject, are retained and committed to writing, while others, which do not thus affect and interest him, soon fade away altogether.

Whoever carefully notices the operations of his own mind, when he makes an effort at composition, will probably be well satisfied, that this account of the intellectual process is very near the truth.

It will be recollected, therefore, that the exercise of imagination in the composition of any theme, which admits of it, is not the exertion of merely a single intellectual ability. It is the development of various susceptibilities, of desire, of the principle of simple suggestion or association, and of judgment or relative suggestion, in consequence of which a feeling of relative fitness or unfitness

arises, on the contemplation of the conceptions, which have spontaneously presented themselves.

§. 317. *Further illustrations of the same subject.*

We first think of some subject. With the original thought or design of the subject, there is a co-existent desire to investigate it, to adorn it, to present it to the examination of others. The effect of this desire is to keep the general subject in mind ; and, as the natural consequence of the power of association, various conceptions arise, in some way or other related to the general subject. Of some of these conceptions we approve in consequence of their perceived fitness to the end in view, while we reject others on account of the absence of this requisite quality of agreeableness or fitness.

For the sake of convenience and brevity we give the name of IMAGINATION to this complex state or series of states of the mind. It is important to possess a single term, expressive of the complex intellectual process, otherwise, as we so frequently have occasion to refer to it in common conversation, we should be subjected, if not properly to a circumlocution, at least to an unnecessary multiplication of words. But while we find it so much for our convenience to make use of this term, we should be careful and not impose upon ourselves, by ever remembering, that it is the name, nevertheless, not of an original and independent faculty, which of itself accomplishes all, that has been mentioned, but of a complex state or of a series of states of the mind. A single further remark may be added in illustration of the process of the mind in literary composition. It has been seen, to how great a degree efforts of this kind depend on the laws of suggestion. When, therefore, a person has sat down to write, it may be expected, that he has furnished himself with pen and paper, and that he has books around him. The presence of these and other things, subordinate to the writer's general undertaking, constantly reminds him, by the operation of the same laws, of the subject before him, and recalls his attention, if he discover any disposition to wander from it.

§. 318. *Remarks from the writings of Dr. Reid.*

Dr. Reid (Essay IV. ch. 4.) gives the following graphical statement of the selection, which is made by the writer from the variety of his constantly arising and departing conceptions.

"We seem to treat the thoughts, that present themselves to the fancy in crowds, as a great man treats those [courtiers] that attend his levee. They are all ambitious of his attention. He goes round the circle, bestowing a bow upon one, a smile upon another; asks a short question of a third, while a fourth is honoured with a particular conference; and the greater part have no particular mark of attention, but go as they came. It is true, he can give no mark of his attention to those, who were *not there*; but he has a sufficient number for making a choice and distinction."

§. 319. *Grounds of the preference of one conception to another.*

A question after all arises, on what principle is the mind enabled to ascertain that congruity, or incongruity, fitness or unfitness, agreeably to which it makes the selection from its various conceptions. The fact is admitted, that the intellectual principle is successively in a series of different states, or, in other words, that there are successive conceptions or images, but the inquiry still remains, why is one image in the group thought or known to be more worthy than any other image, or why are any two images combined together in preference to any two others? The answer is, it is owing to no secondary law, but to an instantaneous and original feeling of approbation or disapprobation. Those conceptions, which according to this original power of approving or disapproving, are found to be suitable to the general outlines of the subject, are detained. Those images, which are perceived to possess a peculiar congruity and fitness for each other, are united together, forming new and more beautiful compounds. While others, although no directly voluntary power is ex-

exercised over either class, are neglected, and soon become extinct. But no account of this vivid feeling of approval or disapproval, of this very rapid perception of the mutual congruity of the images for each other or for the general conception of the subject, can be given, other than this, that with such a power, the original author of our intellectual susceptibilities has been pleased to form us.

§. 320. *Mental process in the formation of Milton's imaginary paradise.*

What has been said can perhaps be made plainer, by considering in what way Milton must have proceeded, in forming his happy description of the garden of Eden.—He had formed, in the first place, some general outlines of the subject; and as it was one, which greatly interested his feelings, the interest, which was felt, tended to keep the outlines steadily before him.—Then, the principles of association, which are ever at work, brought up a great variety of conceptions, having a relation of some kind to those general features; such as conceptions of rocks, and woods, and rivers, and green leaves, and golden fruit.—The next step was the exercise of that power, which we have of perceiving relations, which has sometimes been designated as the susceptibility or power of relative suggestion. By means of this he was at once able to determine, whether the conceptions, which were suggested, were suitable to the general design of the description and to each other, and whether they would have, when combined together to form one picture, a pleasing effect. Accordingly, those, which were judged most suitable, were combined together as parts of the imaginary creation, and were detained and fixed by means of that feeling of interest, which was at first exercised towards the more prominent outlines merely; while others speedily disappeared from the mind.—And thus arose an imaginary landscape, more interesting, more perfect, than we can ever expect to find realized in nature.

§. 321. *Limitations of imagination by the condition of the senses.*

The power of imagination depends in some measure on the number and condition of the senses. If Milton had been blind from infancy, it cannot be supposed, that he would have been able to have formed that beautiful combination, the description of Paradise. Had he possessed the sense of seeing only in an imperfect degree, furnished, for instance, with only those glimmerings of sight, which persons sometimes possess before being couched for the cataract, he would not have been able to have done it, at least to the degree of perfection, in which the description appears at present.

A person undertakes to describe a battle, who has always been deaf; and in order that he may enjoy every facility for the execution of his plan, he places himself on some eminence, where he can overlook those military manoeuvres and conflicts, the description of which he anticipates giving. He gives us an account of the number engaged, of the position occupied, of the military dress, of the valour of different corps; but it was to him, as he beheld it, and it is to us, as we read it in his description, only a noiseless scene. A deathlike silence prevails. The word of command flies from rank to rank and we hear it not. The hoofs of war-horses beat the earth, and we perceive the motion, without a perception of the noise of their tread. We witness the flashes of cannon on the hills of the battle, but while we feel the trembling of the earth, no sound reaches us.—What an inadequate conception must a person, who does not possess the sense of hearing, have of many of those circumstances, which inspire others with emotions of pleasure and sublimity!

Similar remarks will apply to those cases, where there is a failure of any other sense.—We read of a philosopher, who attempted to give a blind man a notion of scarlet colour. The philosopher assured him, that it yielded a lively and pleasant sensation; that it was an emblem of courage; and being considered ornamental to them, was worn by

kings and princes. Having specified these and some other things, connected with this colour, he then asked the blind man, whether he had any idea of scarlet? The blind man replied, that he thought he had some notion of it, and that he supposed, it must be more like the sound of a trumpet, than any thing else in the world.

But it will be asked, how does it then happen, that men born blind, frequently talk of visible things with great readiness and propriety? When they with propriety apply epithets to objects of colour, such conversation must be the effect of memory. They repeat what they have heard others say. For, if they are perfectly blind, they certainly can have no idea of what is meant by colours; being as ignorant of them as any man whatever is of the phenomena of the world of spirits.

In their efforts, (which, in consequence of their unhappy condition, they undoubtedly often make,) to form a conception of light, their ideas must always be conformed, in a great measure, to the knowledge they already possess by means of the other senses. And it must consequently be very erroneous, as there is certainly nothing in the nature of light, analogous to the nature of sound, or of taste, or of smell.

§. 322. *Explanation of the case of the poet Blacklock.*

In connection with the remarks, which have already been made on the limitation of imagination by the state and condition of the senses, it seems proper to say something in explanation of the case of the poet Blacklock.

Thomas Blacklock, a poet and a minister of the established church of Scotland, lost his sight in consequence of a disease at five months of age. It does not come within our plan to repeat in this place his interesting and instructive history, any further than to say that, notwithstanding the great misfortune, under which he laboured, he made such advances in learning as to merit the reputation of a philosopher as well as of a poet. "I am acquainted, (says Dr. Beattie, referring to Blacklock,) with a person,

who, having at the age of five months lost his sight by the small-pox, retains not the idea of any thing visible; and is yet a good poet, philosopher, and divine, a most ingenious as well as a most worthy man. He dreams too as frequently as other people, and dreams are universally ascribed to the fancy; and his writings prove, that he possesses, what every critick will allow to be, and what Addison himself would have called, a sublime imagination."

In the remarks before made, we find a solution, in some measure, of his poetical ability. He was undoubtedly a person of a natural capacity superiour to that of most men; and possessed in particular of no small share of poetical sensibility. Giving loose to the ardour of his imagination, he was led to treasure up in his memory, from conversation and from hearing works read, the words, WHITE, BLACK, PURPLE, and others, descriptive of the colour of objects. His general accuracy, in the application of them, may be accounted for in this way. He had acquired in the same way, that he had acquired the words themselves, those associations, which people in general are in the habit of attaching to such colours, as have been mentioned. With the word, WHITE, for instance, although it could not suggest to him the idea of that colour, he associated the ideas of cheerfulness and innocence; with the word, PURPLE, the ideas of splendour and majesty; with the word BLACK, the qualities of gloom and melancholy. It is not, therefore, wholly unaccountable, that he should have been able to speak of the "*purple*" dawn, or of "*dark*" woodland scenery, although he at the same time was without any correct notions of the primary signification of these terms.

§. 323. *Works of imagination give different degrees of pleasure.*

Different persons receive different degrees of pleasure from works of imagination. The fact is well known. Something may be said in explanation of it, in reference to poetry; which is one of the creations of the power, we are considering. And the same explanation will apply in part to other efforts of the imagination.—Although poetry is

generally looked upon to be a useful and pleasing art, we find, that all have not the same relish for its beauties. The pleasure, which is felt by a reader of poetry, will in general depend upon two circumstances, (1) the conformity of his experience to the things described, (2) the liveliness of his own imagination.

The pleasure received will depend, in the first place, on the conformity of the reader's experience, to the things described.—Accordingly, if the scene of a poem be laid within the limits of a commercial city, if it deal chiefly in the description of the habits of the people residing there, and of their various turns of fortune, it will excite but comparatively little interest in those, who have been brought up wholly amid retired and rural scenes. And when, on the other hand, the scene of it is laid in the country, when it deals in the toils, and sorrows, and joys of country life, it excites comparatively little interest in those, who have never had any actual experience of that kind. Burn's *Cotter's Saturday Night* is an admirable poem; but it is exceedingly more pleasing to those, who can clearly perceive, from what they have themselves seen, and heard, and felt, its accurate conformity to nature, than to those, who cannot.

The pleasure, which is felt by a reader of poetry, will depend also in part on the liveliness of his own imagination.—In poems the different parts are only imperfectly filled up; some describe more minutely than others; but the most minute describers only trace the outlines. These remain, therefore, to be filled up by the reader. But the ability to do this is found in very different degrees in different persons; some very rapidly and admirably finish the picture, and others do not. The latter, consequently, remain, in a considerable degree, unaffected, and perhaps condemn the poem as deficient in interest; while the former read it with great feeling and pleasure.—This statement accounts for the fact, that the same poem gives to different persons different degrees of satisfaction; and also, in as much as it requires in all cases some power of imagination in the reader, explains the circumstance, that so many

appear to be utterly destitute of any relish for the beauties of the poetick art.

§. 324. *Utility of the creations of poetry, painting, &c.*

Some have questioned the utility both of the poetick and of the other fine arts.—It is evident, that the benefits and evils of poetry, whatever they may be, cannot be accurately pointed out, without the separate consideration of each department, into which the art is divided. The elegy, lyricks, the epick, pastorals, descriptive and didactic poetry, and the tragedy, all have their different laws; they aim, in some measure, at different objects, and cannot be judged of on precisely the same principles. But as the consideration of each department separately cannot be attempted, a few general remarks must answer.—Poetry preserves the recollection of early days. When we are nigh having every finer feeling entirely blunted by the cares and interests of life, it revives before us a youth of innocence, confidence, and affection. In doing this, it tells us, we must not give up all to the world, and that if we would be happy and beloved, we must yield something to the cultivation of the moral sensibilities. This is one benefit.—Poetry dwells with enthusiasm on the works of nature. It makes us acquainted with the blue mountains, the “gray old trunks” of trees, the voice of floods; and while it holds up the beauties of nature, it secures a yet higher object, in more fully revealing to us the character of the author of nature. And here is another good result.—Poetry may be said to be the book of the passions. It paints man without reserve; both his good and bad qualities. It describes his truth, his gratitude, and his magnanimity; and, on the other hand, discloses with equal freedom the unworthy passions of pride, self-seeking, envy, revenge. The benefit here is, not merely that the passions, which are the elements of human nature, are made known, but that it is done with such precision, with such truth, and strength.—Further; poetry realizes by anticipation those restless and expansive desires, which we find naturally in the soul. He, who scrutinizes the operations of

his mind, will observe it full of activity ; it is ever struggling against the bounds, which limit it ; as if fully conscious of its immortal destiny, it not only looks forward to something new, but to something greater, and higher, and nobler. And hence it enters with joy into those bright creations, those new worlds, which it is the prerogative of poetry to form ; and they seem to it a congenial residence.

Most of these considerations in favour of the poetick art will apply also to painting. These are truly sister arts ; they require, in the performance, a kindred genius ; their object is essentially the same. Poetry indeed addresses itself to the ear, and painting to the sight ; but both are addressed to the imagination. And the success in either case will depend greatly on the degree, to which the imagination is awakened up.—Other fine arts, musick, sculpture, architecture, as well as poetry and painting, are arts of the imagination. They are addressed to it, and are founded on it. They may all be equally misapplied and perverted. But when directed, as they ought to be, it is no less evident, that they are indications of the progress of the human mind, and may contribute to men's convenience and enjoyment.

§. 325. *Of misconceptions by means of the imagination.*

But while it is safe to admit, that the imagination may be made subservient to valuable purposes, it is no less true, that it may sometimes mislead us. The following are instances among others, where this is the result.—Our admiration of the great may be reckoned a prejudice of the imagination. We are apt to suppose them possessed of personal attractions, and of the highest happiness ; and not only this, to invest them with every worthy moral attribute. “The misfortunes, (says a late writer,) of Mary, Queen of Scots, and of her descendant, Prince Charles Edward, commanded the sympathy, the love, and the enthusiasm of millions. In the cause of these princes, how many have joyfully sacrificed life, though neither of them was worthy or capable of reigning ! How many labour still to blot out every stain from their memory ! And yet

every individual, in the circle of his own private friends and acquaintances, can undoubtedly find many persons more distinguished for virtue, for good principles, for integrity of character, than the prince for whom he is willing to lay down his life ; but a friend, a private man is invested with none of those attributes, always dazzling but often false, which are calculated to strike the imagination."

—Our imaginations mislead us also in respect to war, whenever we contemplate it at a distance, and do not feel its effects at our own firesides and homes. We delight to dwell upon the idea of mighty power, which it suggests ; we recal to memory the homage and plaudits, which have been given to the brave ; we combine together conceptions of all, that is stirring in musick, and brilliant in equipage. In a word, it is a kindling imagination, seizing upon some imposing circumstances, that leads multitudes into deplorable mistakes as to the character of that great scourge of the human race.—Again ; the power of imagination often gives a wrong colouring to future life. It is here as in some prospects in natural scenery,

'Tis distance leads enchantment to the view.

Whatever may be our present evils, we imagine there is good to come. We rush forward in the pursuit of it, like children, who set out with spirited emulation, expecting to grasp in their hands the splendours of the rainbow, that appears to them to rest upon the neighbouring hills.

§. 326. *Explanation of the above misrepresentations of the imagination.*

But how happens it, that this faculty so often misleads us ? What explanation can be given ?

The answer is, that the mind turns away with a natural aversion from whatever causes it pain or uneasiness ; delighting to dwell on the elements of beauty and sublimity, and in general on all scenes, which excite in it pleasant emotions. As there is, therefore, more or less in all actual situations, which causes dissatisfaction, we shall always find, in every condition, in which we are placed, something, which detracts from what we imagine to be the sum of hap-

pineness. The evils, which are around us and near us, we must know; Our situation forbids an attempt at the concealment of them. Every day forces the lesson of human adversity on our attention. But when we look abroad from the reality, which exists at home, from the cares and the sorrows, which are ever near at hand, to other scenes and prospects, we do not think of trial and disappointment, because we are not obliged to. We fix our attention upon those circumstances, which appear most favourable and interesting; and, consequently, know nothing of the uneasiness and misery, which actually exist in the imaginary Paradise of our creation.—For instance, we are apt to associate, as has been remarked, with persons in very high stations in life, the ideas of unalloyed happiness, of moral excellence, of manliness and beauty of form; but while men in the most exalted stations have no less a share than others of bodily deformities and suffering, they have still greater anxieties; their hours of sorrow are often more numerous than those of any other class of persons. It was well inquired by King Henry in Shakespeare,

“What infinite heart's ease must kings neglect,

“That private men enjoy?——

“And what have kings, that privates have not too.

“Save ceremony, save general ceremony?”

And under the direction of the same mental tendency, by which we are led to mark the elevations without noticing the depressions of the great men of the earth, we are led also to see the sublimities and hide from our sight the degradations and miseries of war, to behold the sunshine of the future, but no clouds.

§. 327. *Feelings of sympathy aided by imagination.*

But where the imagination is not at liberty to fix itself exclusively upon pleasing circumstances, the results as to the degree of creative power are the same, although they are of a different kind. In the one case, it forms creations of beauty, magnificence, sublimity; in the other, it is equally efficacious in combining images of gloom and suffering. Hence a quick & powerful imagination is no small aid in the

exercise of the sympathetick feelings. Accordingly, when two men, the one a person of imagination, the other not, meet a poor man, who has been suddenly reduced to poverty, they will be found to have different degrees of sympathy for him. The former no doubt will pity the unfortunate man; but the latter will pity more. He will think of his former situation; he will follow him to his dwelling; he will see in his "prophetick eye" the tears of his family; in a word, he will, as a general statement, have more feeling for all individuals in suffering, and, consequently, be likely to do more for them.

Thus, in Sterne's *Sentimental Journey*, he is led by some circumstance to think of a captive in one of the French State Prisons. He gives the reins to his imagination; "and looks through the twilight of the grated door to take the picture.—I beheld, (says he,) his body half-wasted with long expectation and confinement, and felt what kind of sickness of the heart it is, which arises from hope deferred. Upon looking nearer, I saw him pale and feverish. In thirty years, the western breeze had not fanned his blood. He had seen no sun, no moon, in all that time; nor had the voice of friend or kinsman breathed through his lattice.—His children—But here my heart began to bleed, and I was forced to go on with another part of the portrait."

§. 328. *Remarks on taste in the fine arts.*

Closely connected with the subject of imagination and of emotions of beauty and sublimity, is that of taste in the fine arts.—TASTE is a habit of correctly judging of beauty and deformity in works of art, founded on the experience of emotions.—We find all men to be formed with some degree of sensibility to the appearances of external nature: some things strike them as pleasing; others as displeasing. We may notice the developement of this susceptibility of emotions in children, who show an attachment for some objects, a dislike for others; at one time are pleased, at another pained. The most stupid peasant lingers to behold the clouds, that brighten in the setting sun; and at his rude fireside listens with pleasure to old

tales and ballads.—As no man is without feeling, we all begin after a time to ascribe certain characteristics to objects, answering to those emotions, which have been excited in us. We set down some as pleasing, others as displeasing; some as beautiful, others as deformed; and others as possessing the marks of grandeur and sublimity. That is, we form a judgment of objects, founded on the emotions, which we experience.

We do not ordinarily speak of the works of nature, as objects of taste; they excite in us emotions of various kinds; but in general we employ the term, *TASTE*, in reference to the fine arts.—A man may be said to have a taste in the arts, who, from a careful study of the emotions, that have been excited in himself or others on various occasions, can tell, with a considerable degree of accuracy, what works will be found generally pleasing, or the opposite.—This implies, that he will readily seize upon the great characteristics of the work, whatever it is, of which he judges; and being able to point out its prominent excellencies and defects, he can be expected to give the general character of the painter, poet, sculptor, &c. on whose production he may happen to be remarking.

Thus, a man of taste in painting gives us the following idea of the character of Rubens. His figures, as we learn from him, were not always drawn with so much ease and with such studied correctness, as those of some other painters. His superiority lies not in an attitude or any peculiar expression, but in the general effect, in the genius, which pervades and illuminates the whole. The works of some other painters are the effect of great labour and pains; and, with very few defects, are after all spiritless and insipid; but those of Rubens seem to have come from his hand with ease and freedom, and are full of spirit. The brilliancy of his colours, and their lively opposition to each other, the flowing freedom of his outline and the animation of his pencil keep alive the attention of the spectator, and make him feel a degree of that enthusiasm, with which the painter himself was carried away.—This was Sir J. Reynolds's opinion of Rubens.

§. 329. *Characteristicks, &c. of a good taste.*

In connection with the illustrations above given, we may lay down two characteristicks of a good taste.—The first is **CORRECTNESS**.—The province of correctness of taste is the detection of blemishes. The taste, that has this quality, does not mistake deformities for beauty, and is not likely to be imposed upon by counterfeits, however well executed.—A second characteristick is **DELICACY**. A person of delicacy of taste notices those more refined beauties, which are perceived only by cultivated minds. It marks the latent, as well as the more obvious excellencies.

It is worthy of notice, that the judgments, which a person of taste passes upon works of art, are rapid; he often forms an opinion of them instantaneously. When it is remembered, that taste is not a distinct faculty, but a power, which is acquired, this circumstance deserves some notice. It is explained, however, in the definition, which has been given, viz. Taste is the **HABIT** of judging correctly, &c.—The influence of habit, in giving quickness to our mental operations, was considered in some remarks in the chapter on Attention. The skilful accountant can tell, by a mere glance of the eye, the sum of a long column of figures. The practised military engineer estimates with almost intuitive readiness the fitness or unfitness of a spot of ground for encampments and fortifications.—It is the same in the decisions of **TASTE**. The person, who has this quality in a good degree, is impressed with the excellencies and defects of a production in the arts at once. That is, he takes into view the various circumstances, which go to constitute its beauty or deformity with such quickness, that it appears to be a single perception.

CHAPTER TWENTY SIXTH.

OF WIT AND HUMOUR.

§. 330. *Emotions of the ludicrous.*

WE shall not be in a way to give a correct idea of WIT and HUMOUR, without briefly examining another class of our feelings, viz, *emotions of the ludicrous*. It is difficult to give a precise definition of this feeling, although, when we analyze it, we find it to be complex, embracing an emotion of surprise, also of quick and playful delight. But the pleasing part of the emotion receives a peculiar modification, and one, which cannot be fully conveyed in words, in consequence of our perception of some incongruity in the person or thing, which is the cause of it.

§. 331. *Occasions of emotions of the ludicrous.*

BUT what are the true occasions of emotions of the ludicrous?—In answer, we say, that this feeling is never experienced, except when we notice something, either in thoughts, or in outward objects and actions, which is unexpected and uncommon. That is to say, whenever this emotion is felt, there is always an unexpected discovery by us of some new relations.—But then it must be observed, that the feeling in question does not necessarily exist in consequence of the discovery of such relations merely. Something more is necessary, as may be very readily seen.—Thus, we are sometimes, in the physical sciences, presented with unexpected and novel combinations of the properties and qualities of bodies. But whenever we discover in those sciences relations in objects, which were not only unknown, but unsuspected, we find no emotion of ludicrousness, although we are very pleasantly surprized.—Again, similes, metaphors, and other like figures of speech imply in general some new and unexpected relations of

ideas. It is this trait in them, which gives them their chief force. But when employed in serious compositions, they are of a character far from being ludicrous.—Hence we infer, that emotions of ludicrousness do not exist on the discovery of new and unexpected relations, unless there is at the same time a perception, or supposed perception of some incongruity or unsuitableness. Such perception of unsuitableness may be expected to give to the whole emotion a new and specifick character, which every one is acquainted with from his own experience, but which, as before intimated, it is difficult to express in words.

§. 332. *Of Hobbes' account of the ludicrous.*

There has not been an entire uniformity on the subject of emotions of the ludicrous. It would seem, that Hobbes (*HUMAN NATURE*, CHAP. IX.) considered feelings of this kind, as depending on a modification of mere pride in a comparison of ourselves with others to our own advantage. He says of laughter, which, when considered in reference to the mind and independently of the mere muscular action, is nothing more than a feeling of the ludicrous, that it is “a sudden glory, arising from a sudden conception of some eminency in ourselves, by comparison with the infirmity of others, or with our own formerly.”—To this notion of the origin of this class of our feelings, there are some objections; viz.—(1) In many instances we have the feeling in question, when there is evidently no discovery of any infirmity, either in the witty person, or in the subject of his wit, over which we can ourselves triumph with any good reason.—(2) Further, if the doctrine, which resolves the emotion of ludicrousness into a proud comparison of ourselves with others, were correct, it would follow, that the most proud and self conceited men would be most inclined to mirth and sociability, which we do not find to be the fact.—(3) According to Hobbes' notion of the origin of these feelings, we have only to go into the company of the most ignorant and stupid, if we wish to be exceedingly merry. In such company we could not fail to be sensible

of some eminency in ourselves, in comparison with the infirmities of others. We should here be in a situation, corresponding to his definition of laughter, but there can be no doubt, that multitudes would be but very little inclined to indulge that feeling in the midst of such associates.

But while we cannot receive this writer's account of the feeling in question, we may undoubtedly be well agreed in respect to it, as far as this ;—There is an emotion of surprise, combined with a quick and playful delight of a peculiar kind, and this emotion arises on the discovery of unexpected relations of ideas, and the perception or apparent perception of some incongruity.

§. 333. *What is to be understood by wit.*

We apprehend, that an emotion of the ludicrous is always, in a greater or less degree, experienced in all instances of WIT, as the term is generally understood at the present time. We are, therefore, led to this definition of it ;—WIT consists in suddenly presenting to the mind an assemblage of related ideas of such a sort as to occasion feelings of the ludicrous.—This is done in a variety of ways ; and among others in the two following.

§. 334. *Of wit as it consists in burlesque or in debasing objects.*

The first method, which wit employs in exciting the feeling of the ludicrous, is, by debasing those things, which are *pompous* ; that is, those things which have an appearance of greater weight and gravity, than they are truly entitled to. Descriptions of this sort are termed burlesque.—An attempt to lessen what is truly and confessedly serious and important, has in general an unpleasant effect, very different from that, which is caused by true wit.—In the practice of burlesque, as on all other occasions of wit, there is a sudden and uncommon assemblage of related ideas. Take as an instance the following comparison from Hudibras ;

“ And now had Phœbus in the lap

“ Of Thetis taken out his nap ;

" And, like a lobster boiled, the morn
 " From black to red began to turn.

Of a similar kind are those instances, in which objects of real dignity and importance are coupled with things mean and contemptible, although there is no direct and formal comparison made. As in this instance from the above-mentioned book ;

" For when the restless Greeks sat down
 " So many years before Troy-town,
 " And were renowned, as Homer writes.
 " For well-soled boots, no less than fights.

In these instances we have related ideas. In the first, there is undoubtedly an analogy between a lobster and the morning, in the particular of its turning from dark to red. But however real it may be, it strikes every one, as a singular and unexpected resemblance. In the other passage, it is not clear, that Butler has done any thing more than Homer in associating the renown of the Greeks with their boots, as well as their valour. But to us it is hardly less uncommon, and singular, not to say incongruous, than the former.

§. 335. *Of wit when employed in aggrandizing objects.*

The second method, which wit employs in exciting emotions of the ludicrous, is by aggrandizing objects, which are in themselves inconsiderable. This species of wit may be suitably termed *mock-majestick* or *mock-heroick*. While the former kind delights in low expressions, this is the reverse, and chooses learned words, and sonorous combinations. In the following spirited passage of Pope, the writer compares dunces to gods, and Grub-street to heaven.

" As Berecynthia, while her offspring vie
 " In homage to the mother of the sky,
 " Surveys around her in the blest abode
 " An hundred sons, and every son a god ;
 " Not with less glory mighty Dullness crowned,
 " Shall take through Grubstreet her triumphant round ;
 " And her Parnassus glancing o'er at once,
 " Behold an hundred sons, and each a dunce.

In this division of wit, are to be included those instances where grave and weighty reflections are made upon

mere trifles. In this case, as in others, the ideas are in some respects related, or have something in common; but the grouping of them is so curious and unexpected, that we cannot observe it without considerable emotion.

" My galligaskins, that have long withstood
 " The winter's fury and encroaching frosts,
 " By time subdued, (*what will not time subdue!*)
 " An horrid chasm disclose.

There are various other ways, in which ideas are combined together, so as to excite in us that emotion, which follows whatever we term witty.—It is worthy of remark, that some sayings, which would otherwise have appeared to us witty, lose their intended effect, whenever we are led to suspect, that they were premeditated. Hence an observation or allusion, which would be well received in conversation, would often be insipid in print; and it is for the same reason, that we receive more pleasure from a witty repartee, than a witty attack.—From this circumstance we infer, that part of the complex feeling, which follows a witty saying, is an emotion of vivid pleasure or admiration, at witnessing the power of the witty person in bringing together peculiar combinations of thought.

§. 336. *Of the character and occasions of humour.*

We in general apply the terms, *humour*, and, *humorous*, to descriptions of a particular character, whether written, or given in conversation.—We find among men what seems to us a disproportion in their passions; for instance, when they are noisy and violent, but not durable.—We find inconsistencies, contradictions, and disproportions in their actions.—They have their foibles, (hardly any one is without them,) such as self-conceit, caprice, foolish partialities, jealousies, &c. Such incongruities in feeling and action cause an emotion of surprise, like an unexpected combination of ideas in wit. Observing them, as we do, in connection with the acknowledged high traits and responsibilities of human nature, we can no more refrain from an emotion of the ludicrous, than we can, on seeing a gentleman of fine clothes and high dignity making a false step,

and tumbling into a gutter.—A person, who can seize upon these specialities in temper and conduct, and set them forth in a lively and exact manner, is called a man of humour; his descriptions are humorous descriptions.—Addison has given many examples of the humorous in the incidents & characters of the *Tatler* and *Spectator*. But excellence in this species of writing is not very frequently found, and is an attainment of considerable difficulty. In general it implies something peculiar in the character of the writer. There are some persons, who seem to have a natural inclination for noticing those traits in the feelings and actions of men, which cause ludicrous emotions. Whatever may be the cause of it, there can hardly be a question as to the fact, that some possess this characteristick more than others;—this was particularly true of Swift and Fontaine. Writers, who have a natural turn of this sort, will be more likely to excel in the humorous, than others.

§. 337. *Of the advantages of wit and humour.*

Wit and humour are not without some obvious benefits of no small value.—(1) They serve to enlighten many hours, which without them would pass heavily along. Nor are they sources of pleasure merely. The mind, that constantly rejects them, becomes by degrees reserved and cheerless, and is greatly unfitted for social converse. Few minds can sustain the constant pressure of serious concerns. When occasionally employed with objects, which seem trifling, they afterwards enter with more vigour into weighty matters, so that at times the good-natured relaxations of humour and wit are not only pleasant, but necessary.

(2) There is also another benefit to be considered.—They sometimes operate, as a seasonable check on many improprieties. It is these, indeed, which are the genuine occasions, that call them forth. And when considerably marked and important, the wit, which they call forth, is a most suitable rebuke. When it appears in that more bitter and imposing form, which we term ridicule and sarcasm, it keeps back some from offending, who can neither be ef-

fectually checked by publick opinion, nor any internal moral restraints. Some, who are insensible to almost every thing else, cannot muster courage enough to withstand the "world's dread laugh."

CHAPTER TWENTY SEVENTH.

OF INSTINCTS.

§. 338. *Of the meaning of the term instinct.*

It may be given as a definition of instinct, that it is a natural and invariable tendency to do certain things, without previous forethought and deliberation.—Instincts are found both in men, and in the inferiour animals; particularly in the latter, as they are furnished with the power of reasoning only in a very small, if in any degree. The instincts of animals, by means of which they are taught to employ their powers of offence and defence, and to which we can trace such ingenious results as the ball of the silk-worm, the house of the beaver, &c. are among the most pleasing parts of the study of natural history, Particularly so, because they strikingly illustrate the care of that Being, who assures us, that not a sparrow falls to the ground without his notice. By giving them instruments adapted to their situation, He has virtually given them food, and raiment, and barns, and houses.

§. 339. *Of instinctive feelings in the human species.*

Man, possessed of the power of comparing, abstracting, generalizing, and reasoning, does not stand in need of instincts to the degree, in which they are necessary to the brute creation. But, although tendencies of this kind are generally acknowledged to have an existence in the human species, it is not certainly agreed upon, how far

they exist, nor in what particular instances. This, however, seems to be thought clear, that they are both fewer in number, and also more restricted in the degree of their power, than in the brute species.

In making inquiries on the subject as to what are instinctive feelings in the human species, and what are not, two things should be kept in view.—Instincts are to be considered as distinct from the automatick or mechanical actions of the bodily system, such as the contraction and dilatation of the chest and lungs in breathing by the motion of certain muscles. Automatick actions have a cause, but the cause is not in the mind, and is no part of the mental structure. They rise solely from the bodily mechanism.—Further, instincts are to be distinguished from our natural appetites, and other mere animal feelings. Thus, hunger and thirst in a child are not instincts, but the disposition, which it exhibits in the earliest period of its existence, to gratify those wants in a particular way, is justly thought instinctive. Accordingly, we may lay it down as a general statement, that while the appetites and some other animal sensations imply a feeling of want ; *INSTINCT*, in distinction from them, is the principle, which leads to their gratification.

Some have thought, that there are instinctive feelings of a higher kind, than those, which lead men to relieve their animal wants ; such as the feelings of fear and resentment, the desires of wealth, and society, & knowledge, and power, also our benevolent and sympathetick feelings. Some of these supposed instinctive tendencies deserve a brief consideration.

§. 340. *Of the desire of society, power, &c. as instinctive feelings.*

The desire of society has been reckoned among the ultimate and instinctive principles of our nature. This, we imagine, cannot be done without violence to the usual acceptation of language. An instinctive principle always has a particular object in view, and is borne for-

ward to that particular object without being counteracted. The desire of society arises out of the circumstances of our situation ; men find themselves dependent on each other ; and their enjoyment and security being promoted by entering into society, they are of course led to desire it. But let the mother flee into the wilderness, and nourish her child apart from all other human beings, and he will grow up wild, untractable, and like the son of Hagar, "his hand will be against every man's hand." This would not be, if the desire of society were an instinct, in the common acceptance of that term.

The desire of knowledge has also been set up, as an instinctive feeling.—Men are led to seek knowledge, because they are unable to do without it. But having acquired so much of it as answers for their present turn, most men are quite satisfied with that. They do not find in themselves a strong and unappeasable tendency to make further acquisitions, which would be the case, if the desire of knowledge were instinctive.—Similar objections may be made to the admission of the desire of power, as an instinctive principle. The passion is strong ; it makes its appearance at a very early period ; and if there be ground for considering it a natural passion, it is not, from that circumstance merely, to be considered an instinct. It ought to be considered also, that this feeling, however early it may exist hid and nestling in the heart, is brought forward and cherished by the circumstances of our condition. Man feels himself in want of various conveniences and enjoyments ; he imagines, if he had power, he could procure them ; but without it, he is unable to. He seeks power, therefore, in various ways, as a means of securing what he imagines, although perhaps very erroneously, the highest degree of happiness.

This feeling is often called forth and is greatly strengthened in this way, although it is by no means impossible, that it may be loved for its own sake, independently of its aid in promoting one's personal enjoyments.—The feelings, therefore, of fear, resentment, avarice, ambition, benevolence, justice, &c. may be natural ; they may have

their origin in the human heart, however they may be modified by circumstances ; and, undoubtedly, all this is true of them. But after all they do not seem to be of that definite and invariable character ; they have not that precise and certain adaptation to particular ends, which would entitle them to be termed instincts.

Instinct is much more clearly defined, and apparently more efficient in the inferior animal creation, than in man ; it is here chiefly, that it is to be regarded, as an interesting and important subject of inquiry. In examining the intellectual economy of the human species, we find other principles of action, and such, as from their nature and important results, more strongly arrest our attention.

§. 341. *Marks of difference between instinct and reason.*

There are some characteristic differences between instinct and reason, worthy to be noticed.—(1) Of these one is, that instinct requires no previous instruction.—While reason expands and gathers strength by slow degrees, advancing in childhood, and still advancing in mature age, instinct may be said to be always full-grown, always perfect. Accordingly it has been observed, that a bird, which has always been confined in a cage, will build, when suitable materials are furnished it, a nest precisely similar to those of its own kind in the woods. It requires no instruction, how to lay the sticks like the carpenter, nor where to mix in the clay like the mason, but shows very striking proofs of ingenuity without a long process of previous training.

(2) Another ground of difference is, that instinct is more accurate in its results, than reason.—We have reference here to the adaptation of means to an end ; and, consequently, the observation will apply only to those cases, where both instinct and reason are employed in performing the same or similar things. A man may build his house too high or too low, he may lay the foundation well or ill, but in general there is no mistake in the construction of a bird's nest, or the cells of a bee. Reason, in the adap-

tation of means to an end, is liable to a thousand errors; but in instinct there is a sort of infallibility. The construction of a honey-comb indicates the greatest accuracy; the cells are all regular hexagons; a form, which permits them all to be equal and similar, without any useless interstices; and for skill and precision throughout, it almost defies imitation. But this is the work of instinct.

Again, INSTINCT is limited, reason is always progressive.—However successful instinct may be in conducting its possessor to a particular end, its power is evidently limited to that particular purpose. It is an impulse, implanted by the Creator, which carries forward the agent promptly and unerringly to one end, and one only. It can operate, it can be felt no further. But reason, although more liable to err, has a wider range; it is applicable to a far greater variety of purposes; and hardly having an existence at first, it ultimately embraces the universe.

§. 342. *Of intellectual power in animals.*

INSTINCT is found frequently in brutes, seldom in men; it operates very extensively among the former, in a very limited degree in the latter. So that when we consider the origin of this principle, as being directly from the Supreme Being, we can almost subscribe to the maxim, *DEUS EST BRUTORUM ANIMA.*—In connection with the subject of instinct in the inferiour animals, it is natural to take this opportunity to say something of the indications, which they give of intellectual power. While they are highly furnished with instincts, they are not without some things, analogous to traits of intellect in the human race. Helvetius thought, that the superiority of intellect in man is to be ascribed solely to difference in corporeal organization, and to the influence of some adventitious circumstances in his outward condition. No doubt, there are advantages, in the conformation of the human system, for the exercise of intellectual power; but the question is not so much what brutes might be with another, as what they actually are, with their present form.—The inferiour animals have memory; and it would seem from some facts, that some

have possessed this power in a remarkable degree. This is seen in the readiness, with which they retrace objects in an inverted order, as when a dog or horse returns by a road, over which he has passed only once, and at a considerable time distant.—Animals possess the power of association.—This is implied in their possessing memory, inasmuch as association is a principal element in that complex mental state. Their associations, however, are chiefly those of contiguity in time and place; but they are tenacious, and not easily altered. It is chiefly by availing themselves of this circumstance, that men are able to acquire and retain their dominion over them.—Animals are thought by many to have the power of reasoning in a small degree.—Dogs and bears are learnt to dance and tumble by rewards for their obedience, and by chastisements for the contrary. They are supposed in such cases to reason in this way. “If I obey, I shall be caressed and fed; If I do not, I shall be beaten; it is, therefore, better to obey;”—a regular syllogism. But all this, some will say, can be otherwise accounted for; viz. Obedience is associated with an idea of pleasure, and refusal to obey with the idea of pain. When this association is strong, the animal may be led to do what is imposed upon him without any logical deduction.—Mr. Locke thought, that brutes can reason, but in so doing are limited to particular ideas, not having the power of forming general or abstract ideas.—Animals have many of the passions, which are common among men, as shame, pride, revenge, gratitude. Some of them are capable of an attachment to men. A man will sooner cast off and injure his friend, than a dog betray a kind master. But there is no evidence, that they are influenced by moral impressions, or that they can discern between good and evil in conduct.

§. 343. *Actions from instinct not moral actions.*

If men were guided in all their actions by instinct, they would be no longer moral, but necessary agents. They would be urged forward with such directness and force,

that, while they infallibly obeyed, they could claim no merit for obedience. This is true, if we do not admit fear, ambition, avarice, benevolence, &c. to be instinctive feelings; and there are very few, who will not deny them the character of instincts in the sense, in which we usually apply that term to animals.

In order that man may be accountable, it seems to be necessary, that good and evil, that right and wrong should be set before him, with a liberty of choosing between them. When this is the case, there are motives influencing him to pursue one course, and opposite considerations operating upon him to pursue another; and his moral rectitude, his merit or demerit will be known by the choice, which he makes under such circumstances. But in pure instincts there is no balancing of motives in this way; and, consequently, no accountability, and no praise and blame.

CHAPTER TWENTY EIGHTH.

THE WILL, CONSCIENCE, &c.

§. 344. *Of volition and its objects.*

VOLITION is the determination of the mind to do or not to do something; or it may be expressed more briefly by saying, that it is the determination or act of choice.—It can be objected to this definition, that to describe volition, as a determination of the mind, or as an act of the mind, is merely to increase the list of terms, and to call the thing in question by another name. There is some ground for this objection; but it will not have so much weight, when it is noticed, that the qualifying terms point out the nature of the act or determination; viz. an act of the mind, in refer-

ence to which two things are compared together, and which gives the preference to one over the other.—Further, it is to be kept in memory, that the simple acts of the mind do not readily admit of definitions, however convenient and desirable they may in some cases be. Something, it is true, can be said. But in order to have a clear notion of such simple acts, we ought to make them subjects of attentive reflection, as we find them to exist in ourselves. And, therefore, the above definition, although it be a defective one, will not be without its use, if we connect with it a careful observation of what takes place within us. Certainly without such observation, no definition whatever can give a full idea of what is intended to be communicated.

The capability, which the mind has, of putting forth such a determination, of exercising choice, is commonly intended by the phrase, *POWER OR FACULTY OF THE WILL*, and also by the *WILL* simply.—All acts of the will, that is, all volitions must have objects. A person cannot well exercise the act of willing, without having his mind directed towards something, which is the object of his volition. To will without willing something, would be much the same, as to remember without remembering something.

§. 345. *Nature and kinds of motives.*

As volition is found to exist only in certain circumstances, it may, therefore, be considered an effect, and, consequently, must have a cause, which gives rise to it; using the term, cause, in the sense heretofore explained, viz. as implying merely a regular and constant antecedence. The causes of volition are motives; so that a motive may be defined to be any thing, which moves or excites the mind in putting forth volition. Without motives, that is, without some ground or reason of our choice, volition would never be exercised, and, consequently, there would never be voluntary action, since a voluntary action implies, and is preceded by volition.

Motives, in reference to their tendency to cause voli-

tion are spoken of, as either weak or strong. That motive, which has a less degree of previous tendency to move the will, or, what is the same thing, appears the less inviting, as it is presented to the view of the mind, is called the weaker motive. On the contrary, that motive, which appears to the mind the most inviting, and, therefore, has the greater tendency to move the will, is the stronger motive.

—The strength of a motive is found to vary in two ways, or from two causes.—(1) It will be found to vary, first, not only with the particular object, which is before the mind, but also with the attendant circumstances. Many things, which once appeared eminently desirable, and strongly influenced our volitions, appear less desirable, and have less power over us, in consequence of being accidentally associated with other things. In other instances, the effect is directly the reverse.—(2) Things, that exist in the view of the mind, have their tendency to move the will increased or diminished according to the nature and circumstances of the mind, which views them. Thus, the same thing will appear differently to different individuals, and also to the same individual at different times.

MOTIVES, in reference to their origin, may be divided into two classes, INTERNAL, and EXTERNAL.—By the internal, we mean those, which are connected with our physical organization, such as hunger, thirst, and bodily pains and enjoyments; and also our passions or affections, whether good or evil. Accordingly in all languages, people speak of being impelled, of being excited to action in these ways.—By the external, we mean such as can be traced to external causes, and exist in something without us. All external objects, which please or disgust us, operate upon us as motives. It is true, that they influence the will through the medium of the passions; but as the influence exercised may be traced to them, as the ultimate subjects of it, they may properly be termed the motive. As all external objects, which are not utterly indifferent, affect the will more or less, it is useless to attempt an enumeration of the motives from this source. In what way it happens, that certain appetites & passions, or that certain external objects

which appear to us pleasing and desirable, affect the will, and cause volition, cannot be explained. Nor can we give an explanation of any other instance of cause and effect; but of the truth of the fact, that the will is influenced by means of them, there is no room to doubt.

§. 346. *Of moral liberty in man.*

The volition will always be determined by the strongest motive; in other words, the will always is, as the greatest apparent good, or as what appears most agreeable. To say otherwise would imply the direct contradiction, that the mind chooses, what it does not choose, and likes what it dislikes. Our voluntary actions correspond to our volitions; that is, the action will be as the volition is; and yet men under the circumstances stated, having their volitions in perfect correspondence with the motive, and the action agreeing with the volition, are justly said to act freely, or with liberty. But moral liberty, we apprehend, is not rightly considered a quality or property of man, analogous to his other mental and physical qualities, but a privilege.

If this be a correct notion, LIBERTY, in its full extent, is the privilege of acting according to our wishes, without being subject to any restraint. This definition coincides very nearly with the concise explanation of it by the unlearned, who commonly say, that liberty consists in choosing and doing, as one pleases. It will, indeed, be said, that there is an indissoluble relation between the volition and the motive. This is true. But the circumstance, that nothing can have the character of a motive independently of our feelings, and that the efficient or strongest motive is never at variance with them, takes away from this fixed and inflexible relation the attribute of constraint.

Liberty, then, may be predicated of man in two respects, viz. liberty of WILL, and liberty of EXTERNAL ACTION.

As to the will, it may be said, that it always has liberty, is always free, using the terms in accordance with the above definition. When a person, looking upon a number of objects, makes choice of one in preference to another,

he does it agreeably to his wish or inclination, and has the highest possible liberty; we can conceive of no greater. As, therefore, there is an inseparable connection between the volition, and the preference or the strongest desire of the heart, it is safe to assert, that there is no constraint on the volition, and that the will is always free. In support of the fact, that the volition, whatever its relation to the motive, is in the same direction with the preponderance of inclination, an appeal may be made to the common experience of men; and it can hardly be doubted, that on examination every one will find it confirmed by what takes place in himself. If they do not find this to be the case, they will find, that the will is not always conformed to the strongest motive, which will lead to plain contradictions, if the terms are used in the sense here attached to them.

There is also liberty of external actions.—But while we say, that there is liberty in this respect, it cannot be denied, that it is subject to contingencies, which do not exist in relation to the freedom of volitions. In other words, the freedom of external actions is sometimes from various causes interrupted. For instance, a person has a desire to go to a certain place; he exercises volition or wills to go to that place; and the means, by which his determination is to be effected, is the motion of his feet. If there be nothing to prevent this motion, then his actions are free, as well as his will; but if he be bound or shackled, then there is a constraint, a deprivation of freedom, in respect to the action. And it is the same in all analogous cases. There may be a freedom in the volition, while there is a constraint and hinderance in the performance; so that necessity can be predicated of external actions, but no necessity analogous to that, which is predicated of actions, can be predicated of the mental resolve. But in all outward actions, where such necessity truly exists, men are not accountable.

Note.—The view of liberty above given seems to coincide essentially with that of M. Destutt-Tracy. He has the following remarks;—"Je dis que l'idée de liberté naît de faculté de vouloir; car, avec Locke, j'entends par liberté la puissance d'exécuter sa volonté, d'agir conformément à son désir; et je soutiens, qu'il est impossible d'attacher une idée nette à ce mot, quand on veut lui donner un autre sens," (*Elémens d'Idéologie*, part 4 et 5, p. 93. 2d. ed.)

The responsibility rests with that extraneous force, whatever its origin, which makes the action contrary to the intention. The action does not properly belong to the subject of it; but to that power, which forced the subject to act contrary to his own wishes.

§. 347. *Of the liberty of the Supreme Being.*

The checks, which are assigned to men's actions, the limits, which are there placed, cannot fail to remind them of their weakness and insufficiency. But their desires are boundless, their views of good and evil are wide and continually progressing; and their volitions invariably fall in with their views and desires.—We are so constituted, that we will or exercise choice, in reference to the last result of an examination; that is, the volition coincides with the present view or inclination. It is the great excellency of our nature, and the consummation of our freedom, that the mind does not remain unmoved under such circumstances; and that it is not without a preference, when it has clearly before itself a view of the highest good or evil. So that our condition in this respect seems to be essentially the same with that of the Supreme Being himself. It is evident, that there is no being more free and perfect than God; and yet he is inevitably governed in all his doings by what, in the great range of events, is wisest and best. His fixed and invariable principles of action are wisdom and goodness; and whatever he does, is in accordance with them. So that it may be said, that the Deity himself has his laws; and surely the weak mind of man cannot presume to be more free and unrestrained, than that of the God, who made it.—Any other liberty than this cannot well be supposed to exist. “If (says Mr. Locke) to break loose from the conduct of reason, and to want that restraint of examination and judgment, that keeps us from doing and choosing the worse, be liberty, madmen and fools are the only free men. Yet I think nobody would choose to be mad, for the sake of such liberty, but he that is mad already.”

§. 348. *Evidence from observation of influence over our volitions.*

There is proof from observation, that our volitions are influenced by motives, or that our actions will be agreeably to what we consider the highest good. That is, in our intercourse with men, we cannot help observing, that they act precisely, as they would do, if this were the case; and, therefore, we conclude it to be so. So evident is it from what we observe around us, that the will, as well as the imagination, and memory, and other mental powers, has its laws, as to have elicited the remark, that a certain regular order may be traced in the conduct of men, analogous to the regular course, which we observe in the physical world. It can be pronounced, that men will act in a particular way in given circumstances with hardly less confidence, than that trees will grow in a given situation. So that there is a general course of nature applicable to the mind of man, as well as to external material things; and not less applicable to the moral, than the intellectual part of his spiritual constitution. But if we take away the influence of motives, if we say that men are not governed by what appears to them the highest good; then this regularity is marred, the moral order and beauty of nature are broken up, and it will be impossible to form any opinion of the probable course of men, although we may be well acquainted with the minutest circumstances of their situation.

§. 349. *Encouragements to the making of moral efforts.*

The fact, that men are influenced and directed by the motives set before them, is an encouragement in the making of moral efforts, and in the use of such means, as are adapted to reclaim the vicious, or to strengthen habits of virtue. When men go astray, what can we do more in our attempts at reclaiming them, than apply promises, threatenings, and exhortations? We address these to them as *motives*, expecting that they will be received, and have their influence as such. These are the means, which we em-

ploy, and we find that they meet with success. But liberate the will from all particular tendencies and law; show that we are utterly unable to predict the nature of its acts under all circumstances whatever, and then there is no encouragement to apply means for the attainment of moral ends; there is no encouragement to moral efforts of any kind. When this is the case, we can never tell what is suitable to be addressed to men, in order to induce them to change their course of conduct.

§. 350. *All motives are modifications of our own feelings.*

The greater the consideration, which is bestowed upon the nature of motives, the clearer the insight, it is supposed, there will be into the correctness of these opinions. It is an essential attribute of every motive, that it be something, which, as it is viewed by the mind, is agreeable to it. There may be different degrees in the pleasing quality, which it possesses, but it can never be wholly wanting in elements of an agreeable nature. The origin of the agreeableness of that class of motives, which was termed internal motives, is evidently in the mind itself. Hunger and thirst and other appetites, revenge and charitable impulses and other passions and desires do not operate upon us, and direct the will, and, consequently, the action, in consequence of any thing extraneous to ourselves, and out of our constitution. As to motives of this kind, therefore, if there be any constraint, it must be in our own breasts, in ourselves, in the natural impulses of our own intellectual economy. But it is evident, that such constraint as this cannot be at variance with any rational idea of the highest liberty.

If then we look again at external motives, we shall be led to the same result. All objects and actions are utterly destitute of character, as far as men are concerned, when they are regarded, as existing independently of their own minds. Abstracted from those internal emotions, of which they are the cause, they are all equally good and bad, equally beautiful and ugly, equally sublime and ludicrous, equal-

ly indifferent. It is our own feelings, therefore, reflected back upon all external objects of whatever kind, which infuse into them their qualities of excellence. This character of excellence, this pleasing attribute in its turn operates upon the mind. All motives, therefore, are, either directly or indirectly, our own feelings. They differ from each other not in their nature, but in being variously modified. And, hence, to assert, that the soul is governed by motives, is much the same as to say, that it is governed by itself. It is like the citizens of a free republic; it is not without law, but it obeys no enactments, but such as are agreeable to its own choice.

§. 351. *Of moral motives.*

Whatever is beautiful and interesting in nature may, in certain circumstances, operate upon us as a motive. Incitements or motives may be found also in whatever is beautiful or interesting in moral conduct. Accordingly, encomiums have been often lavished on the excellence of virtue, and men have been earnestly invited to love and to obey it. Hence, we are led to remark upon virtue, upon merit and demerit, upon moral obligation, &c.; in other words, we are to consider moral motives.—And this, in short, is to inquire, why man, regarded, as an accountable being, is bound to do any one thing in preference to another.

§. 352. *Virtue and vice in agents, not in actions.*

And in order to clear the way to this inquiry, it is to be noticed, in the first place, that actions, in themselves considered, have no character.—It is true, that we speak of actions, as good or bad, as virtuous or vicious, as worthy of praise or of censure. It is from our very constitution impossible to behold actions of moment coming from our fellow beings, without having certain vivid feelings, which lead us to speak of them, as right or wrong, worthy or unworthy. But if we analyze our feelings, if we accurately consider what it is, to which we apply these epi-

thets, we shall come to the conclusion, that by actions, as the subjects of moral merit or demerit, is meant the *agent acting*. The action is nothing, except so far as it is significant of certain mental qualities; and, therefore, virtue considered as distinct from the virtuous person, and vice, as distinct from the vicious person, have no existence. There is no virtue or vice, merit or demerit, *a parte rei* or independently of the agent, any more than there is a beauty or sublimity of that character.

§. 353. *True import of the terms, virtue and vice, merit and demerit.*

And yet it remains to be stated, in what way such terms may be employed consistently with truth, and without causing misconception.—Observe then, that certain actions, that is, certain agents in acting, excite in us emotions of approval, and others, on the contrary, cause emotions of disapprobation. Certain actions, therefore, are made, from our very constitution, to sustain a particular relation to certain emotions or intellectual states. The relation, which exists between actions and emotions of disapproval, is expressed by the terms, *demerit*, and *vice*;—the relation, which exists between other actions and emotions of approval, is expressed by the terms, *merit*, and *virtue*.

Virtue and vice, merit and demerit, therefore, inasmuch as they are the mere relations existing between the thing approved and the approving mind, are evidently nothing self-existing, like the ‘universal essences of the Schools,’ or the ‘eternal ideas’ of Plato. At most they can only be considered a felt relation; and, therefore, can never exist abstracted from and independently of the agent. But while we are willing to allow them an existence only as relations, we are ready to concede, that in this sense there is permanent and immutable distinction between them. That is, whatever actions are generally approved by men can never be otherwise than approved by them, while their mental constitution remains the same, as at present. On the other hand, whatever actions are generally disappro-

ved, can never be otherwise, while the same constitution remains. Vice can never become virtue ; virtue can never become vice.—And this interesting truth will appear the more impressive, when we consider, that the permanency and immutability of the distinction between virtue and vice have their origin in the Supreme Being himself. It is He, that has ordained, that certain actions shall cause certain emotions, that some things shall be approved and others not ; it is He, that has instituted the relation, which exists between the deed, which is performed, and the feeling, which responds to it. As He was governed by the highest wisdom in so doing, we may well conclude, that there is a permanency in moral distinctions no less lasting, than the divine nature.

§. 354. *Of moral obligation and conscience.*

But something remains to be said as to the particular inquiry, Why men are bound to do one thing in preference to another,—Why they are under moral obligation?—It has sometimes been given, as a definition, that MORAL OBLIGATION is that, by which we are bound to perform that, which is right, and avoid that, which is wrong.—There have been various opinions concerning the *ground* of moral obligation, or what it arises from. One ascribes it to the moral fitness of things ; another finds it in the decisions of reason ; another in expediency, and in the promotion of the publick good ; another in Revelation. But after hearing these and other solutions of the ground of moral obligation, the question still returns, Why does a regard for the publick good, or a belief in Revelation, or the conclusions of reason render it right for me to do a particular action, and wrong not to ? When such a question is put to us, we find ourselves driven back upon the feelings of our own hearts. Our Creator, in forming us with a susceptibility of emotions of approval or disapproval, has furnished us with a guide in the discharge of our duties to Him, to our fellow beings, to ourselves. Without this susceptibility, which under another name is called CONSCIENCE, men would feel no regret and compunction even in disobeying

the express commands of God himself. Without this susceptibility, it would be all the same, whether they regarded or disregarded the most affecting calls of charity and of the publick good. Without this, benevolent intercourse would cease; religious homage would be at an end; the bonds of society would be loosed and dissolved. The true source, then, of moral obligation is in the natural impulses of the human breast;—in a man's own conscience. It is in this, that we find the origin of the multitude of moral motives, that are continually stirring up men to worthy and exalted enterprizes. This is the law, which governs them; and as it is inseparable from that nature, of which the Supreme Being is the author, it is the law of God.

§. 355. *Want of uniformity in our moral judgments.*

But here some difficulties are to be considered. It has often been objected to the doctrine, which attributes our moral judgments and moral obligation to an original susceptibility, that there is too great a want of uniformity in the results of such alleged susceptibility. Dr. Paley seems to have thought, that there is great weight in this objection. His views are given in connection with the following narration, which he has translated from Valerius Maximus.—The father of Caius Toranius had been proscribed by the Triumvirate. Caius Toranius coming over to the interests of that party, discovered to the officers the place, where he concealed himself, and gave them withal a description, by which they might distinguish his person, when they found him. The old man more anxious for the fortunes and safety of his son, than about the little, that might remain of his own life, began immediately to inquire of the officers, who seized him, Whether his son was well, Whether he had done his duty to the satisfaction of his generals? That son, replied one of the officers, so dear to thy affections, betrayed thee to us; by his information thou art apprehended and diest. The officer with this struck a poniard to his heart, and the unhappy parent fell, not so much affected by his fate, as by the means to which he owed it.—The advocates of an original susceptibility of

moral emotions maintain, that if this story were related to the most ignorant and degraded Savage, to one, who had been cut off from infancy from intercourse with his fellow-men, he would at once exhibit disapprobation of the conduct of Toranius, and pity and respect for his father. Dr. Paley, inasmuch as he discountenanced the notion of a natural conscience, and of original judgments of virtue and vice, has given, at some length, the arguments of those, who deny this result. Following the suggestions of our own feelings, we cannot help thinking with those, who hold, that the Savage would have sentiments favourable to the father, and against the son; provided that the Savage were made acquainted with the relation between them, and with the nature and degree of the acts of kindness, which are always implied in the history of those, who sustain the parental relation. Unless he were made to understand this, his decision, whatever it might be, would be irrelevant to the present inquiry.

Dr. Paley and those, who think with him, remind us, that theft, which is punished by most laws, was not unfrequently rewarded by the laws of Sparta. We are reminded also of the cruelty exercised by Savages upon their prisoners taken in war, and of the appalling fact, that in some countries aged and infirm parents have been cast out by their children, and exposed to a sure and lingering death. Now, in reference to these facts, we readily admit, that, in consequence of some accidental circumstances, moral distinctions have sometimes been neglected or overruled in civilized communities. Nor can it be denied, that some Savage tribes, debased by want and ignorance, have given instances of injustice and cruelty of the most shocking nature. But we cannot readily see, how these few exceptions disprove the general rule; although they are undoubtedly exceptions to it. The general statement, that men are originally susceptible of moral emotions, is confirmed by the experience, and testimony, and conduct of millions and millions of mankind. The great mass of the human race, amid all the differences of climate and government, and local institutions and observances, pronounce,

with the most evident uniformity, on the excellence of some actions, and on the iniquity of others. Reasoning, therefore, in this case, as we do in others, we cannot admit the discordant voice of some depraved individual, or the accidental moral obliquities, which have at times pervaded some civilized communities, or the testimony of the savage and ignorant inhabitants of a remote island, as disproving what is evidently the unanimous declaration of all the world besides. They prove, that the original susceptibility of moral emotions may be weakened and perverted, but that is all. They show, that conscience may be misguided by accidental circumstances, or that its influence may be blunted and annulled, but they are vainly brought to show, that conscience has no existence.

§. 356. *Conscience sometimes perverted by passion.*

Admitting the fact, that the moral susceptibility may sometimes be blunted and perverted, something more seems to be necessary, viz., That we should briefly state, under what circumstances, or from what causes, this takes place.—And, in the first place, the due exercise of this susceptibility, or what is otherwise termed CONSCIENCE, may be perverted, when a person is under the influence of violent passions.—The moral emotion, which under other circumstances would have arisen, has failed to arise in the present instance, because the soul is intensely and wholly taken up with another species of feeling. But after the present passion has subsided, the power of moral judgments returns; the person, who has been the subject of such violence of feeling, looks with horror on the deeds, which he has committed. So that the original susceptibility, which has been contended for, cannot justly be said to cease to exist in this instance; although its due exercise is prevented by the accidental circumstance of inordinate passion.—Further; those, who imagine, that there are no permanent moral distinctions, because they are not regarded in moments of extreme passion, would do well to consider, that at such times persons are unable rightly to apprehend any truths whatever. A murderer, when draw-

ing the blade from the bosom of his victim, probably could not tell the quotient of sixteen divided by four, or any other simple results in numbers ; but certainly his inability to perceive them under such circumstances does not annul numerical powers and distinctions. Why then should the same inability take away moral distinctions ?

§. 357. *Complexity in actions a source of confusion in our moral judgments.*

A second reason, why men, although they are under the guidance of an original susceptibility, do not always form the same judgments of actions, is to be found in their complexity.—We have already seen, that actions are nothing of themselves, independently of the agent. In forming moral judgments, therefore, we are to look at the agent ; and we are to regard him, not only as willing and bringing to pass certain effects, but we are to consider him also as the subject of certain desires and intentions ; and we are unable rightly to estimate these, without taking into view various attendant circumstances. In some cases the intention is obvious ; and in these the judgment is readily formed. But in other cases, the results are complex ; they are a mixture of good and evil ; and hence arises a difficulty in ascertaining the true intention and design of the agent. When different individuals are called upon to judge of an instance of this kind, they will be not unlikely to give their attention to different circumstances, or they may have different views of the same circumstances, considered as indications of feeling and intention. This being the case, the judgments, which they will pass, will in effect be pronounced upon different things, inasmuch as they will have such difference of views. Hence in a multitude of actions, there will be sufficient reason for a diversity of moral sentiments, where by superficial observers a perfect uniformity may have been expected.—These remarks throw some light upon the supposed approbation of theft among the Spartans. This people were trained up by their political institutions to regard property as of little value ; their lands were equally divided ; they ate at publick

tables ; and the great end of all their civil regulations was to render the citizens athletick, active, patient, and brave. Every thing else was considered subordinate. The permission, which was given to the Spartan lads to steal, was a part of the publick regulations. It was a sort of tax, which the citizens voluntarily imposed upon themselves, in order to encourage vigilance, endurance, and address in the younger part of the community ; and hence, when they were detected immediately after the theft, they were severely punished for deficiency of skill. Accordingly the theft, which was permitted and approved by the Spartans was a very different thing from what goes under that name with us. The mere act may have been the same, but there was no correspondence in the results and attendant circumstances, and in the degree of evil intention.— Similar inquiries in other instances will go far in explaining many apparent deviations from the permanent distinctions between vice and virtue, and reduce the number of cases of supposed want of uniformity in moral sentiments.

§. 358. *Influence of early associations on moral judgments.*

Our moral judgments, in the third place, are sometimes perplexed and perverted by means of early associations.—The principle of association does not operate upon the moral capacity directly ; it operates indirectly, with considerable influence. When a particular action is to be judged of, it calls up, in the mind of different individuals, different and distinct series of accessory circumstances. This difference in the tendencies of the suggesting principle can hardly fail to have considerable effect in modifying the sentiment of approbation or disapprobation, resulting from the consideration of any particular action.—Savage life gives us an illustration of this. Owing to the peculiar situation of those in that state and the consequent early associations, a factitious and exaggerated importance is attached to mere courage ; and gentleness, equanimity, and benevolence, are, as virtues, proportionally depressed.—When vices are committed by near friends

by a brother, or a parent, they do not excite in us such abhorrence, as in other cases. Our prepossessions in favour of the persons, who have committed the crime, suggest a thousand circumstances, which seem to us to alleviate its aggravation. We frame for them a multitude of plausible excuses, which we should not have thought of doing, had it not been for the endearments and intercourse of our previous connection.

While we contend, therefore, for an original susceptibility of moral emotions, it must be admitted, that its decisions are sometimes perverted by the violence of momentary passion; the uniformity of its decisions is interrupted also by complexity in the action and a complication of good and evil in the results; and some partial and erroneous judgments may be attributed to the influence of association. To these causes are to be ascribed those instances of striking deviation from moral rectitude, which the opposers of an original susceptibility of moral emotions, are fond of bringing up. Those instances, we apprehend, do not disprove the existence of the susceptibility, but merely show, that it is sometimes liable to perversions.

§. 359. *Of enlightening the conscience.*

It clearly follows from the views, which have been taken, that the moral susceptibility will operate with the greater readiness and efficiency, in proportion as the knowledge of ourselves and of our relations to other beings is increased. And the knowledge to be acquired with this end may be stated in some particulars.—(1) As the Being who gave us life, has given us conscience, and, consequently could not intend, that conscience should act in opposition to himself, it seems to be an indispensable duty, that men should be acquainted with his character. His character and will are made known in those works, of which He is the author, and in the Scriptures. If we have right views of the Supreme Being, and of the relation, which we sustain to Him, our conscience will infallibly approve what he has enjoined, and disapprove what he has forbidden.—(2) Inasmuch as it results

from the relation, which we sustain to the Supreme Being, that the decisions of conscience are not, and cannot be at variance with his laws, but will agree with them, whenever they are made known, it follows, that all should be acquainted with the moral and religious precepts, which he has communicated to us. To every mind, that has proper views of the self-existence of God and of our dependence upon Him, it will be enough to justify any action, that *He has said it*. The mere disclosure of his will cannot but render, in all cases, an action approved in the sight of conscience, whatever may be our ignorance of the consequences connected with it.

(3) As all duties, which truly result from the relations, which we sustain to our fellow beings, are expressions of the will of God, we are to consider what he requires us to perform in respect to our immediate circle, to the poor and the sick, to our neighbourhood, and to society in general. Our feelings in respect to the performance of such duties cannot be so clear and vivid, if we exclude the Supreme Being from our consideration of them, as they would otherwise be.

—(4) Since the decisions of conscience are often greatly perverted by the undue influence of passion, men should both guard against the recurrence of passionate feelings in general; and when at any time they have reason to suspect themselves of being under the influence of such passion, the decision on the merits or demerits of any particular action ought to be put off to a more favourable period. Nor are we less to guard against prejudices,—the prejudices in favour of friends, and against those, whom we may imagine to have injured us, the prejudices of sects, political parties, &c.; for they often give the mind a wrong view of the action, upon which it is to judge. Also when actions are complex, either in themselves or their results, the greater care is requisite in properly estimating them.

§. 360. *Of guilt when a person acts conscientiously.*

The question has sometimes been started, Whether a person is in any case to be considered as guilty and to be

punished for actions, done conscientiously ; for instance when certain ignorant Savages are supposed to act conscientiously in putting their infirm and aged parents to death.—Undoubtedly, in many cases, where people act conscientiously, there is great guilt. And the reason of it is evident. We have seen, that conscience, is in some measure under our control ; it may be enlightened ; it may be strengthened ; or it may be greatly weakened, and in some cases be made to approve of actions of the most unworthy and sinful kind. Men, therefore, are to have a right conscience ; this great and exalting principle is to receive, and ought to receive the very first attention ; and they are accountable, whenever it is neglected. Otherwise we furnish a very easy and convenient excuse to the iniquitous perpetrators of all the cruelties of the Inquisition, of all the persecutions of the Protestants, of all the acts of unkindness and tyranny, which have ever been exercised upon individuals and communities.—And the position, that men are accountable and guilty for having a wrong conscience in proportion to their means of knowledge, holds good in respect to the most ignorant and degraded Savage tribes, as well as in respect to civilized nations. It is true, no individual ought to assume the province of judging, what that degree of guilt is ; for no one is competent to it. All, that is meant to be asserted, is, that when persons feel an emotion of approval in doing wrong, (that is, in doing what is condemned by the general moral sentiments of mankind, and by the written law of God ;) and yet have within their reach neglected sources of knowledge, which on being laid open to the mind, would have caused different feelings, they are criminal for such neglect of the information before them, and, consequently, cannot under such circumstances be rendered otherwise than criminal by any internal approbation.

CHAPTER NINETEENTH.

DEMONSTRATIVE REASONING.

§. 220. *Of truth and different kinds of it.*

There is no small difficulty in giving a definition of truth, which will be satisfactory to all. The following is perhaps as unexceptionable as any;—**TRUTH** is the conformity of our thoughts or mental states to things, as they actually exist.—Agreeably to this definition, we may say of any propositions whatever, whether expressed in words or merely mental, that they are *true*, whenever they represent things, as they are. And, consequently, all are necessarily either true or false, being either conformed or not conformed to the nature and state of things.—**Truth** does not depend upon belief. The proposition, that redness is a quality inherent in a soldier's coat, is, no doubt, firmly believed by many, but is not true in the sense, in which it is generally understood to be so. We have already seen, that this and other colours are sensations in the mind. The belief, which people have in regard to it, does not affect the truth of the proposition itself.—**TRUTH** has by some writers been divided into two kinds, viz. *necessary* and *contingent*.—Necessary truths are such as always exist the same, and can neither be caused, nor annulled by the will of any being whatever. The proposition, that the three angles of a triangle are equal to two right ones, expresses a truth of this kind.—Contingent truths have relation to those things, which are not necessarily permanent. The proposition, that the world exists, expresses a truth of this description.

§. 221. *Of the ways in which truth is discovered.*

TRUTH seems to be but another name for knowledge; and among the means, which a beneficent Providence has

put into our hands for the acquisition of it, the three following are the most considerable, viz. THE SENSES, INTUITION, and REASONING.

All our knowledge commences with the senses, as the ideas from this source are prior to any others; without them we do not readily perceive, how our minds could ever have been called into action. If the senses be one of the appointed means of conveying to us truth or knowledge, then we must suppose, that they give us ideas of things, as they actually exist. Nothing can be more evident, than that they give us such ideas of things, as our Maker intended they should; and if in any case we can trace the foundation of our knowledge to the intention or will of Him, who gave us the capacity of knowledge, we ought to be satisfied.—By means of the senses we first become acquainted with external objects, with their form, and some of their various qualities, and properties; so that we originally owe to them those notions, which we have of all the multiplied and wonderful works of creation.

It may perhaps be objected, that we derive erroneous notions of things from the senses in the case of colours, and in some other instances; and that, therefore, the senses cannot be safely regarded, as a foundation or source of knowledge. In reply we observe, that our misapprehensions of colours are not so much owing to the senses, as to the principles of association; and it is altogether clear, that our Maker has given us the power, whenever our mental susceptibilities are fully and happily developed, of correcting all such misapprehensions of whatever origin.—See the chapters on PRIMARY TRUTHS, and on CASUAL CONNECTIONS OF THOUGHT.

§. 222. *Of truth or knowledge from intuition.*

We have knowledge also or new discoveries of truth from INTUITION. This is the name given to the state or operation of the mind, when there is an immediate perception of the agreement or disagreement of two or more ideas, without the intervention of any third idea. For in-

stance,—“three and three are six,”—“things equal to the same are equal to one another,”—“the whole is greater than a part.” In these propositions and others like them, it is at once perceived by the mind, that there is an agreement of ideas, or that what is expressed in the predicate is compatible with what is expressed in the subject of the proposition. On such propositions no deductions of reasoning can confer any additional evidence.

Intuition is nothing more than one of the exercises of that susceptibility, which, we have already seen, the mind possesses of feeling the relation among different objects. We refer here to §. 199, in the chapter on ABSTRACT IDEAS. Hence we notice the mind to be in that state, to which we give the name of intuition, in the perception of the identity and diversity of objects, also of their resemblance or co-existence, and in the perception of the relations of quantity and number, and of cause and effect.

We increase our knowledge or have new discoveries of truth, in the third place, by reasoning.—REASONING is that mental process, by which unknown truths are inferred from those, which are already known or admitted.—It is divided into two kinds, *viz.* DEMONSTRATIVE REASONING, and MORAL REASONING. In this chapter we confine ourselves to demonstrative reasoning.

§. 223. *Definition of propositions and kinds of them.*

But before we can enter with advantage on the subject of reasoning, it is necessary to go into a brief explanation of propositions, which are the subordinate parts in every process of that kind.—A PROPOSITION has been defined to be a verbal representation of some perception, act, or affection of the mind.—Mr. Locke also speaks of mental propositions, or those states of mind, where two or more ideas are compared together, previous to their being embodied and set forth in language.

The parts of a proposition are,—(1) The SUBJECT, or that, concerning which something is either asserted, or denied, commanded, or inquired ;—(2) The PREDICATE, or

that, which is asserted, denied, commanded, or inquired concerning the subject ;—(3) The COPULA, by which the two other parts are connected.—In these two propositions,

Cæsar was brave,

Men are fallible,

Men and *Cæsar* are the subjects ; *fallible* and *brave* are the predicates ; *are* and *was* are the copulas.

Propositions have been divided,—(1) Into SIMPLE or those, whose subject and predicate are composed of single words, as in this

Benevolence is commendable ;—

(2) Into COMPLEX, or those, where the subject and predicate consist of a number of words, as in this,

Faithfulness in religion is followed by peace of mind ;—

(3) Into MODAL, where the copula is qualified by some word or words, representing the manner or possibility of the agreement or discrepancy between the subject and predicate, as in these,

Men of learning *can* exert influence ;

Wars *may* sometimes be just.—

PROPOSITIONS, more or less involved, are necessary parts in every process of reasoning. They may be compared to the separate and disjointed blocks of marble, which are destined to enter into the formation of some edifice. The completed process of reasoning is the edifice ; the propositions are the materials.

§. 224. *Use of definitions and axioms in demonstrative reasoning.*

Demonstrative reasonings are chiefly found in mathematics ; and the first principles of them are definitions. We can never have a demonstration of the properties of a circle, parabola, ellipse, or other mathematical figure, without first having given a definition of them.—The FIRST PRINCIPLES of any science are those propositions, whether facts or merely assumed, from which the remoter truths of that science are derived. Thus in Natural Philosophy the general facts in relation to the gravity and elasticity of the air may, agreeably to this explanation, be

considered as first principles. From these principles in Physicks are deduced, as consequences, the suspension of the mercury in the barometer, and its fall, when carried up to an eminence.—And agreeably to the same explanation, definitions, which may be considered in the light of facts assumed, are the foundation of demonstrative reasonings, or are those propositions, from which by means of the subsequent steps the conclusion is derived.

We must not forget here the use of axioms in the demonstrations of mathematicks;—these are certain self-evident propositions, or propositions, the truth of which is discovered by intuition, such as the following;—"Things equal to the same are equal to one another."—"From equals take away equals, and equals remain." We generally find a number of them prefixed to treatises of geometry; and it has been a mistaken supposition, which has long prevailed, that they are at the foundation of geometrical, and of all demonstrative reasoning. But axioms, taken by themselves, lead to no conclusions. With their assistance alone, it cannot be denied, that the truth, involved in propositions susceptible of demonstration, would have been beyond our reach.

But axioms are by no means without their use, although their nature may have been misunderstood. They are properly and originally intuitive perceptions of the truth, and whether they be expressed in words, as we generally find them, or not, is of but little consequence, except as a matter of convenience to beginners, and in giving instruction. But those intuitive perceptions, which are always implied in them, are essential helps; and if by their aid alone we should be unable to complete a demonstration, we should be equally unable without them. We begin with definitions; we compare together successively a number of propositions; and these intuitive perceptions of their agreement or disagreement, to which, when expressed in words, we give the name of axioms, attend us at every step.

§. 225. *Of the subjects of demonstrative reasoning.*

Demonstrative reasoning differs from any other species of reasoning in the subjects, about which it is employed. Those subjects are abstract ideas and the necessary relations among them. And there may be reckoned, as coming within this class of subjects, the properties of numbers and of geometrical figures; also extension, duration, weight, velocity, forces, &c., so far as they are susceptible of being accurately expressed by numbers. But the subjects of moral reasoning, upon which we are to remark hereafter more particularly, are matters of fact, including their connection with other facts, whether constant or variable, and all attendant circumstances.—That the exterior angle of a triangle is equal to both the interior and opposite angles, is a truth, which comes within the province of demonstration. That water freezes at a temperature of thirty two degrees, that Xerxes invaded Greece, &c. are inquiries, belonging to moral reasoning.

§. 226. *The opposites of demonstrative reasonings absurd.*

In demonstrations we consider only one side of a question; it is not necessary to do any thing more than this. The first principles in the reasoning are given; they are not only supposed to be certain, but are taken for granted, as such; these are followed by a number of propositions in succession, all of which are compared together; if the conclusion be a demonstrative one, then there has been a clear perception of certainty at every step in the train. Whatever may be urged against an argument thus conducted is of no consequence; the opposite of it will always imply some fallacy.—Thus, the proposition, that the three angles of a triangle are *not* equal to two right angles, and other propositions, which are the opposite of what has been demonstrated, will always be found to be false, and also to involve an absurdity; that is, are inconsistent with, and contradictory to themselves.—Nothing more can be wanted

to confirm this, than a careful examination of such propositions.

§. 227. *Demonstrative reasonings do not admit of different degrees of belief.*

When our thoughts are employed upon subjects, which come within the province of moral reasoning, we yield different degrees of assent; we form opinions more or less probable. It is different in demonstrations; the assent, which we yield, is at all times of the highest kind, and is never susceptible of being regarded, as more or less.—In short, all demonstrations are certain. But a question arises, What is certainty? And what in particular do we understand by that certainty, which is ascribed to the conclusions, to which we are conducted in any process of demonstrative reasoning?

§. 228. *Of the nature of demonstrative certainty.*

In proceeding to answer the above inquiry, it is to be observed, that, in demonstrative reasonings, we always begin with certain first principles or truths, either known, or taken for granted; and these hold the first place; or are the foundation of that series of propositions, over which the mind successively passes, until it rests in the conclusion. In mathematicks the first principles, of which we here speak, are the definitions.—We begin, therefore, with what is acknowledged by all to be true or certain. At every step there is an intuitive perception of the agreement or disagreement of the propositions, which are compared together. Consequently, however far we may advance in the comparison of them, there is no possibility of falling short of that degree of assent, with which, it is acknowledged, that the series commenced. So that demonstrative certainty may be judged to amount to this;—Whenever we arrive at the the last step or the conclusion of a series of propositions, the mind intuitively perceives the relation existing, whether it be the agreement or disagreement, coincidence or want of coincidence, between that last step

or the conclusion, and the conditions involved in the propositions at the commencement of the series ;—and therefore, demonstrative certainty is in effect the same as the certainty of intuition.

§. 229. *Of the use of diagrams in demonstrations.*

Mr. Locke has advanced the opinion, that moral subjects are no less susceptible of demonstration, than mathematical. However this may be, we are certainly more frequently required to practice this species of reasoning in the mathematicks, than any where else ; and in conducting the process, nothing is more common, than to make use of various kinds of figures or diagrams.—The proper use of diagrams, of a square, circle, triangle, or other figure, which we delineate before us, is to assist the mind in keeping its ideas distinct, and to help in comparing them together with readiness and correctness. They are a sort of auxiliaries, brought in to the help of our intellectual infirmities, but are not absolutely necessary ; since demonstrative reasoning, wherever it may be found, resembles any other kind of reasoning in this most important respect, viz. in being a comparison of our ideas.—In proof that artificial diagrams are only auxiliaries, and not essentially necessary in demonstrations, it may be remarked, that they are necessarily all of them imperfect, owing to the imperfection of our senses. Our reasonings, therefore, and our conclusions will not apply to the figures before us, but merely to an imagined perfect figure. And a verbal statement of the properties of this imagined perfect figure is what we understand by a DEFINITION, the use of which in this kind of reasoning in particular has already been mentioned.

§. 230. *Influence of demonstrative reasoning on the mental character.*

A considerable skill in demonstrative reasoning is on a number of accounts desirable, although it cannot be denied, that very frequent practice and great readiness in it

§. 368. *Of fear.*

FEAR is an emotion of pain, caused by an object, which we anticipate will be injurious to us, attended with a desire of avoiding such object or its injurious effects.—Here, as in other cases, there is a simple emotion, that of pain; and, in respect to this particular emotion, it does not differ from certain other of the passions. But it differs in some other things, viz. in always having the object or cause of the painful emotion in the future, and also in the particular form of the attendant desire.—Having made desire a part of the passion of fear, and also of other complex states of the mind, which involve emotions, of the passions of love, hatred, sympathy, anger, gratitude, and pride, it may have occurred, ere this, to ask, What is meant by that term?—In answer, it must be acknowledged, that it is difficult to give a satisfactory explanation of it. We can, indeed, say, that desire is preceded by the idea of something, which is the object of it; and also that it is preceded by an emotion of pain or of delight. But on the examination of one's own feelings, it will be readily perceived, that both of these are different from the state of mind in question. "With the mere feelings [of desire,] says Brown, I may suppose you to be fully acquainted; and any attempt to define them, as feelings, must involve the use of some word exactly synonymous, or will convey no meaning whatever."

But to return to the passion under consideration. The strength or intensity of fear will be in proportion to the apprehended evil. There is a difference of original susceptibility of this passion in different persons; and the amount of apprehended evil will, consequently, vary with the quickness of such susceptibility. But whatever causes may increase or diminish the opinion of the degree of evil, which threatens, there will be a correspondence between the opinion, which is formed of it, and the fearful passion.—When this passion is extreme, it prevents the due exercise of the moral susceptibility, and interrupts correct judgment of any kind whatever. It is a feeling of great

power, and one, which will not bear to be trifled with. It may serve as a profitable hint, to remark, that there have been instances of persons thrown into a fright suddenly, and perhaps in mere sport, which has immediately resulted in a most distressing and permanent mental disorganization.—In cases, where the anticipated evil is very great, and there is no hope of avoiding it in any way, the mind exists in that state, which is called *DESPAIR*.

§. 369. *Of hope.*

Such is the extensive influence of that state of the mind, to which we give the name of *HOPE*, that it deserves a separate consideration, although it cannot be reckoned, as a distinct passion. It is truly nothing more than a modification or form of desire. We desire a thing;—if there be but little probability of obtaining it, it is what is termed a *wish*; when there is an increase of probability, the wish becomes *hope*; and when the probability is still further increased, the hope becomes *expectation*, and expectation itself may be distinguished as weak or strong.—Consequently, *HOPE* may be predicated of every thing of whatever kind, where there is desire, whether it be a desire of good or of evil, for ourselves, or for others. When the desire is attended with so little probability as to be a mere *wish*, it is languid; when there is *hope*, it assumes a more vivid and enlivening aspect. We, accordingly, speak of ‘gay’ hope, of ‘cheering,’ or ‘bright’ hope, and regard it as spreading a sort of rapturous light over the distant objects, which it contemplates.

“ With thee, sweet Hope! resides the heavenly light,

“ That pours remotest rapture on the sight;

“ Thine is the charm of life’s bewildered way,

“ That calls each slumbering passion into play.

The influence of that vividness and pleasure of desire, which we term hope, is very great. It is felt, more or less, in all the duties and situations of life. The school-boy is encouraged in his tasks by some hope of reward; and when grown up to manhood, he cheers himself after a thousand disappointments, with some good in prospect.

The poor peasant, who laboriously cultivates his few sterile acres, sees them in his anticipation, rich, and blooming, and prodigal of wealth. It proffers its aid in the chambers of the sick and suffering; and the victim of oppressive tyranny, the captive in the dungeon, is encouraged to summon up the fortitude, necessary to prolong his existence, by the hope, however poorly founded, of future deliverance.

§. 370. *Of jealousy.*

JEALOUSY is a painful emotion, caused by some object of love, and attended with a desire of evil towards that object.—The circumstance, which characterizes this passion and constitutes its peculiar trait, is, that all its bitterness and hostility are inflicted on some one, whom the jealous person loves. The feeling of suspicious rivalry, which often exists between candidates for fame and power, is sometimes called jealousy on account of its analogy to this passion.—There are various degrees of jealousy from the forms of mere distrust and of watchful suspicion to its highest paroxysms. In general the strength of the passion will be found to be in proportion to the value, which is attached to the object of it; and is perhaps more frequently found in persons, who have a large share of pride, than in others. Such, in consequence of the habitual belief of their own superiority, are likely to notice many trifling inadvertencies, and to treasure them up as proof of intended neglect, which would not have been observed by others, and certainly were exempt from any evil intention.

The person under the influence of this passion is incapable of forming a correct judgment of the conduct of the individual, who is the object of it; he observes every thing, and gives it the worst interpretation; and circumstances, which, in another state of the mind, would have been tokens of innocence, are converted into proof of guilt. Although poetry, it is no fiction;

——— " Trides, light as air,
" Are to the jealous confirmations strong.
" As proofs of boly writ. —————

Hence it is justly said to be the monster, that 'makes the meat it feeds on.'—This passion is at times exceeding-

ly violent. At one moment the mind is animated with all the feelings of kindness ; the next, it is transported with the strongest workings of hatred, and then it is suddenly overwhelmed with contrition. Continually vacillating between the extremes of love and hatred, it knows no rest ; it would gladly bring destruction on the object, whom it dreads to lose more than any other, and whom at times it loves more than any other.

§. 371. *External signs of the passions.*

Such of our abstract ideas, as are purely intellectual, are expressed merely by words, and other artificial, and conventional signs. The simple emotions of pleasure and pain, and the passions, of which they form a part, have, each of them, a language of their own, independently of any artificial mode of expressing them ; they are attended with certain external appearances, peculiar to themselves. These external appearances, which consist of certain movements of the countenance and body, accompanied sometimes with inarticulate sounds, constitute a natural language, and very readily signify to all, who behold them, the existence of the correspondent emotions and passions. —The emotions, of joy and grief, which differ from those of pleasure and pain only in degree, the passions of love and hatred, of sympathy, gratitude, jealousy, &c, are all displayed externally in this way ; so that a persons immediate feelings, & sometimes the prominent traits of his character may be understood from them. —Some have regarded the interpretation, which we are able to give of these signs, for instance, of a smile or of a frown, as an instinctive or natural power, with which we are endowed especially for this purpose. And considering the early period, at which we promptly receive them as interpreters of the heart, and the difficulty of resolving the whole of this early power of interpretation into experience, this opinion, which has been advocated by respectable authority, is not without weight. In whatever way it is to be accounted for, the fact, that there are certain signs, appropriate to the emotions and passions, is taught us by our daily

intercourse and experience. And we are greatly indebted to the benevolent oversight of a kind Providence in furnishing us, whether directly or indirectly, with this particular language. Some of its benefits are these.

Among other things it is an introductory step to the formation of oral and alphabetical language. Artificial language, whether we regard it as spoken or written, which are its two great divisions, is arbitrary, and a matter of mere agreement. But if it were not of divine original, as some have contended, it is evident, that there must have been some antecedent signs, by means of which such agreement was first formed. And we can think of no other instrument, which could have been employed to this end, but those signs of gesture and the countenance, which we find from the earliest period of life to be expressive of emotions, and the passions. After the formation of artificial language, they lend some aid in fixing the meaning of words, which are employed to express the feelings, inasmuch as they help us in ascertaining the nature and degree of the feelings themselves, and in distinguishing one from another.—The happiness of domestick society and of our general intercourse with our fellow beings is greatly promoted by these signs. There is a tendency in society to become constrained and artificial, which is checked by them. Looks and gestures give a sort of visible existence to what takes place within; they open a direct access to the heart, and make friends and confidants of those, who would otherwise be strangers. They evidently have a powerful effect in calling into action, and in improving the social affections.—These signs give us information of the putting forth of the malignant and dissocial passions. The lurking hostility, which is often denied in language, is discovered by means of them, and puts us upon our guard. And they do this not only by disclosing the hostile passions of our enemy, but by thus indirectly giving occasion to the existence of the corresponding passion of fear, and consequently by leading us to take precautions for our security.—The utility of the external signs of the passions is particularly to be noticed in cases of affliction. They become to

us most striking intimations of the distress of our fellow beings. We feel, when we behold them, the passion of sympathy, and fly to their relief.

CHAPTER THIRTIETH.

MENTAL ALIENATION.

§. 372. *Of the misfortune of a disordered state of mind.*

The mind of man, when in its full and unbiassed exercise, imparts a dignity to human nature, and is the foundation of its superiority over the irrational part of creation. This being the case, it follows, that when the due exercise of the intellectual powers is permanently disturbed, or when there is naturally some deficiency in them, the dignity of his nature is gone; his ascendancy is lost, and, with the exception of his erect form, there is no mark to distinguish him from the brute. Nothing, therefore, can be a greater misfortune; nothing can be more calamitous, than those mental disorders, of which we are to give some account.—The evils, to which the mind is subject, are many, differing in kind and degree, being hardly less numerous than the diseases of the body. But however numerous, and various, we shall treat of them all under the general head of MENTAL ALIENATION, which is but another name for mental disorders; beginning with idiocy, and prosecuting the inquiry into the characteristic of the various forms of insanity.

§. 373. *Degree of mental power in idiocy.*

Persons, in the condition of idiocy, will be found to have but few ideas of any kind. This small number they are able to compare together, so far as to distinguish objects, in which there are any striking differences. Such, how-

ever, is their weakness, and at times total incapacity of the susceptibility of feeling relations, that the class of abstract ideas, resulting from the perception of the relations of objects, when they are compared together, are not only fewer than those of any other class, but are ill-defined and indistinct. These few ideas they are able to combine together, and form some simple propositions. They have the power of deducing inferences from the comparison of a number of consecutive propositions, that is, by reasoning, only in a very small degree. Their great feebleness of reasoning power is to be attributed partly to the fewness of the ideas and propositions, which they possess; partly, to the dulness of their susceptibility of perceiving relations, the exercise of which is always implied in the comparison of propositions; and partly, to a great weakness of memory. We never find an idiot, who can steadily attend to a long argument, and estimate the point and weight of its conclusion; whether it be the steps of a mathematical demonstration, or an argument of a moral nature.

Owing to this inability to compare propositions and deduce conclusions, the idiot is often unable to take care of himself; he knows no better than to run under the wheels of a carriage, or to set fire to the house, where he would probably be consumed. Hence it is not considered right in those, who are responsible for his conduct and preservation to leave him in situations, where he can do injury to himself or others. Whatever injury he may do, he is not considered accountable. The imbecility of mere intellectual power extends to the susceptibility of moral distinctions. He knows no right or wrong; moral blame or approbation.

This is a description of common cases of idiocy; but there are gradations in this, as well as in all other mental weaknesses and disorders. There are some, who need not to be closely watched by their relatives and friends, and are capable of some species of manual labour; but who cannot be safely entrusted with property, and are unequal to the management of affairs.

§. 374. *Of occasions of idiocy.*

IDIOTISM is sometimes natural ; that is, the causes of it exist from the commencement of life. In many of these cases, there is a greater or less bodily mal-formation ; the skull is of a size less than common, and there is a disproportion between the face and the head, the former being larger in proportion than the latter. The bones of the head are asserted by Dr. Rush to be preternaturally thick ; and the consequence of this is a diminution of the internal capacity of the cranium.——“What appears most striking, (says Pinel, in giving an account of an idiot in the asylum, BICETRE,) is the extremely disproportionate extent of the face, compared with the diminutive size of the cranium. No traits of animation are visible in his physiognomy. Every line indicates the most absolute stupidity. Between the height of the head, and that of the whole stature, there is a very great disproportion. The cranium is greatly depressed, both at the crown and at the temples. His looks are heavy, and his mouth wide open. The whole extent of his knowledge is confined to three or four confused ideas, and that of his speech to as many inarticulate sounds.”——From this instance, which is one of the lowest forms of idiocy, and from others, where there was a similar conformation of the head, Pinel seems to be inclined to the opinion, that a mal-conformation of the head in particular is the cause of idiotism, when it exists from infancy.

That absence or weakness of intellectual power, which is termed idiocy, is often found to exist from other causes. Men of great mental ability have sometimes sunk into the state of idiotism, in consequence of too great application of the mind, combined with a disrelish for social intercourse, which would have checked, and probably have prevented such entire prostration of the intellect. The latter cause is thought to have co-operated in bringing on the fatuity of Dean Swift. In consequence of mean views of economy, he was in the habit of absconding from visitors, and, in denying himself their company, he lost the opportunity both of acquiring new ideas, and of renovating his

former stores of knowledge. His once vigorous mind collapsed into such weakness and ignorance, that he was at last confined in a hospital, which he had himself founded for idiots. Franklin, on the contrary, continued to employ himself, not only in reading and writing, but in conversation; he felt a lively interest in the welfare of his friends, and in the progress of all publick enterprizes and institutions, and at the period of his death, in the 85th year of his age, discovered no weakness and decay of mind.

Idiocy may be induced by mere old age. The senses at that period of life become dull; the ideas received from them are less lively, than formerly; the memory fails, and with it the power of reasoning; and there is combined, with these unfavourable circumstances, a want of interest in persons and events.—Further; this state of the mind may be caused by various diseases such as violent fevers, which at times suddenly disturb the mental powers, produce a temporary delirium, and then leave the intellectual faculties in a permanently torpid and inefficient condition. It may originate also in the abuse of ardent spirits, from great grief, from violent blows on the head, from sudden and great terrour, &c.—The idiocy, which is natural, and exists from infancy, has sometimes been distinguished from that, which is brought on by the above-mentioned and other causes in after life; but the mental condition being in both cases essentially the same, they may properly be considered together in one view. This species of mental alienation is generally incurable.

§. 375. *Illustrations of the cause of idiocy.*

Great and sudden terrour was mentioned, as one of the causes of idiocy. Very great and sudden excitements of any of the passions may produce the same effect. We know of no illustrations of this statement more striking, than the following from the interesting work of Pinel on Insanity.—“The feelings of individuals, endowed with acute sensibility, may experience so violent a shock, that all the functions of the mind are in danger of being suspended in their exercises or totally abolished. Sudden

joy and excessive fear are equally capable of producing this inexplicable phenomenon. An engineer proposed to the committee of public safety, in the second year of the republic, a project for a new invented cannon, of which the effects would be tremendous. A day was fixed for the experiment at Meudon; and Robespierre wrote to the inventor so flattering a letter, that, upon perusing it, he was transfixed motionless to the spot. He was shortly afterwards sent to Bicetre in a state of complete idiotism.

"About the same time, two young conscripts, who had recently joined the army, were called into action. In the heat of the engagement, one of them was killed by a musket ball, at the side of his brother. The survivor, petrified with horror, was struck motionless at the sight. Some days afterwards he was sent in a state of complete idiotism to his father's house. His arrival produced a similar impression upon a third son of the same family. The news of the death of one of the brothers, and the derangement of the other, threw this third victim into a state of such consternation and stupor as might have defied the powers of ancient or modern poetry to give an adequate representation of it. My sympathick feelings have been frequently arrested by the sad wreck of humanity, presented in the appearance of these degraded beings: but it was a scene truly heart-rending to see the wretched father come to weep over these miserable remains of his once enviable family."

§. 376. *Partial derangement by means of the imagination.*

Men of sensibility and genius, by giving way to the suggestions of a melancholy imagination, sometimes become mentally disordered. Not that we are authorized to include these cases as among the more striking forms of insanity; they in general attract but little notice, although sources of exquisite misery to the subjects of them. But such are the extravagant dreams, in which they indulge; such are the wrong views of the character and actions of men, which their busy and melancholy imaginations are apt to form.

that they cannot be reckoned persons of truly sound minds. These instances, which are not rare, it is difficult fully to describe ; but their most distinguishing traits will be recognized in the following sketch from Madame de Stael's *Reflections on the Character and Writings of Rousseau*.

"His faculties were slow in their operation, but his heart was ardent : it was in consequence of his own meditations, that he became impassioned : he discovered no sudden emotions, but all his feelings grew upon reflection. It has, perhaps, happened to him to fall in love gradually with a woman, by dwelling on the idea of her during her absence. Sometimes he would part with you, with all his former affection ; but if an expression had escaped you, which might bear an unfavourable construction, he would recollect it, examine it, exaggerate it, perhaps dwell upon it for a month, and conclude by a total breach with you. Hence it was, that there was scarce a possibility of undeceiving him ; for the light, which broke in upon him at once, was not sufficient to efface the wrong impressions which had taken place so gradually in his mind. It was extremely difficult, too, to continue long on an intimate footing with him. A word, a gesture, furnished him with matter of profound meditation : he connected the most trifling circumstances like so many mathematical propositions, and conceived his conclusions to be supported by the evidence of demonstration.—"I believe," she further remarks, "that imagination was the strongest of his faculties, and that it had almost absorbed all the rest. He dreamed rather than existed, and the events of his life might be said, more properly, to have passed in his mind, than without him : a mode of being, one should have thought, that ought to have secured him from distrust, as it prevented him from observation ; but the truth was, it did not hinder him from attempting to observe ; it only rendered his observations erroneous. That his soul was tender, no one can doubt, after having read his works ; but his imagination sometimes interposed between his reason and his affections, and destroyed their influence : he appeared sometimes void of sensibility ; but it was because

he did not perceive objects such as they were. Had he seen them with our eyes, his heart would have been more affected than ours."

The mental alienation, resulting from a melancholy imagination, is the more deplorable, because it is generally found to be connected with exquisite sensibility, and often with great mental power. Nothing but a warm heart and great ability in combination could originate and frame together the elements of such ideal exaggerations.—Persons, exposed to this mental disorder, should take the alarm; and happy will it be for them, if they can be excited to some decided effort by the future misery, which they are preparing for themselves. They should strenuously endeavour to demolish the world, which their imaginations have created, and come out from their solitude into more active and busy life.

"Go, soft enthusiast! quit the cypress grove,
 "Nor to the rivulet's lonely moanings tune
 "Your sad complaint. Go, seek the cheerful haunts
 "Of men, and mingle with the bustling crowd;
 "Lay schemes for wealth, or power, or fame, the wish
 "Of nobler minds, and push them night and day.
 "Or join the Caravan in quest of scenes,
 "New to your eyes, and shifting every hour,
 "Beyond the Alps, beyond the Appennines.

§. 377. *Of light-headedness.*

There is another of the slighter forms of an alienated mind, which may be termed **LIGHTHEADEDNESS**; otherwise called by Pinel, demence, and by Dr. Rush, dissociation. Persons, subject to this mental disease, are sometimes designated as 'flighty,' 'hair-brained'; and when the indications of it are pretty decided, as a 'little cracked.'—Their disorder seems chiefly to consist in a deficiency of the ordinary power over associated ideas. Their thoughts fly from one subject to another with great rapidity; and, consequently, one mark of this state of mind is great volubility of speech, and almost constant motion of the body. This rapid succession of ideas and attendant volubility of tongue are generally accompanied with forgetfulness in a

greater or less degree. And as the subject of this form of derangement is equally incapable of checking and reflecting upon his present ideas, and of recalling the past, he constantly forms incorrect judgments of things. Another mark, which has been given, is a diminished sensibility to external impressions.

§. 378. *Illustration of this mental disorder.*

Dr. Rush in his valuable work on the Diseases of the Mind has repeated the account, which an English clergyman, who visited Lavater, the physiognomist, has given of that singular character. It accurately illustrates this mental disorder:—"I was detained, (says he,) the whole morning by the strange, wild, eccentric Lavater, in various conversations. When once he is set going, there is no such thing as stopping him, till he runs himself out of breath. He starts from subject to subject, flies from book to book, from picture to picture; measures your nose, your eye, your mouth, with a pair of compasses; pours forth a torrent of physiognomy upon you; drags you, for a proof of his dogma to a dozen of closets, and unfolds ten thousand drawings; but will not let you open your lips to propose a difficulty; crams a solution down your throat, before you have uttered half a syllable of your objection.

He is as meagre as the picture of famine; his nose and chin almost meet. I read him in my turn, and found little difficulty in discovering, amidst great genius, unaffected piety, unbounded benevolence and moderate learning, much caprice and unsteadiness; a mind at once aspiring by nature, and grovelling through necessity; an endless turn to speculation and project; in a word, a clever, flighty, good natured, necessitous man."

§. 379. *Mental derangement of hypochondriasis.*

The mental derangement from hypochondriasis is partial; in some cases, it is slight; in others, it assumes a formidable aspect. The subject of this disease suffers much mental distress, on account of some erroneous views, eith-

or in respect to himself or others. — One imagines, that he has no soul ; another, that his body is gradually, but rapidly perishing ; and a third, that he is converted into some other animal, or that he has been transformed into a plant. We are told in the Memoirs of Count Maurepas, that this last idea once took possession of the mind of one of the princes of Bourbon. So deeply was he infected with this notion, that he often went into his garden, and insisted on being watered in common with the plants around him. Some have imagined themselves to be transformed into glass, and others have fallen into the still stranger folly of imagining themselves dead.

As the characteristic of this disorder of the mind, as far as the emotions and passions are concerned, is that of repining and grief, the subjects of it are found to be peevish, as might be expected, and often irascible. Any delay in the gratification of their wishes, the slightest noise, trivial diappointments of whatever kind produce in them anger ; and they are thus rendered somewhat uncomfortable companions even to their relations and friends.

§. 380. *Of intermissions of hypochondriasis.*

There are not only degrees in this mental malady, (sometimes merely a great depression, at others a combination of grief, and of perversion in the susceptibility of believing,) it is also characterized by occasional intermissions. An accidental remark, some sudden combination of ideas, a pleasant day, and various other causes are found to dissipate the gloom of the mind. In general the intervals of intermission are attended with a high flow of spirits, often corresponding to the previous extreme depression. — Few persons, who have not experienced it, have an adequate idea of the sufferings, which are endured by the unhappy subjects of this disease at its worst stage. The greatest bodily pains are light, when compared to them. There is nothing, which is a source of joy. Labours, and lacerations, and tortures would be welcomed, if they could tear away the soul from the consciousness of its own griefs.

§. 381. *Of the remedies of hypochondriasis.*

The remedies of the mental disease under consideration divide themselves into two kinds. One species are those, which are intended to act directly upon the body, and which, therefore, are found fully detailed in medical treatises. A statement of them cannot be expected here.—The other class of remedies are of an intellectual and moral nature. One of these is the successful diversion of the sufferer's thoughts from the particular subject, upon which he is most disposed to dwell. When the mind can be elevated and torn away from that topic, whatever it may be, a speedy restoration has sometimes been known to follow.—Another is an attempt to correct or alleviate moral impressions by the application of moral motives. If hypochondriasis arise from some supposed injury, it may be removed or at least alleviated, by suggestions tending to lessen the estimate of the amount of injury received. When the injury is very great and apparent, suggestions on the nature and duty of forgiveness are not without good effect.—As all his old associations of ideas have been, more or less, visited and tinctured by the sufferer's peculiar malady, efforts should be made to break them up and remove them from the mind, by changes in the objects, with which he is most conversant, by being introduced into new society, or by travelling. By these means his thoughts are likely to be diverted, not only from the particular subject, which has chiefly interested him; but a new impulse is given to the whole mind, which promises to interrupt and banish that fatal inertness, which had previously encumbered and prostrated it.

§. 382. *The insanity of the passions.*

We come now to some species of mental alienation, more formidable, than those hitherto mentioned. They are not chiefly limited in their effects to the subjects of them; but are sources of loss, danger, and injury to others. So much so, that it is always necessary to watch the per-

sons afflicted, and often, not only to place them in lunatic asylums, but to confine them with chains.—Among the various species of this more decided and fearful derangement of the mind, we may first notice the insanity of the passions, otherwise called insanity or madness without delirium.—The assertion may be unexpected, that there is sometimes insanity, when the powers of perception are in full and just exercise, and when the mind has all its usual ability in comparing ideas, and in deducing conclusions. But numerous instances have proved it true.—This form of insanity is either continued; or is intermittent, and only breaks out at intervals. It causes no alteration in what are usually designated as the intellectual powers, in distinction from the affections. It perverts the passions solely, and the victim of it is borne forward to his purpose with a blind, but irresistible violence.

Pinel mentions a mechanick in the Asylum, BICETRE, who was subject to this form of insanity. It was intermittent. He knew, when the paroxysms of passions were coming on, and even gave warnings to those, who were exposed to its effects, to make their escape. His powers of correctly judging remained unshaken in the commission of the most violent and outrageous acts. He saw clearly their impropriety, but was unable to restrain himself; and after the cessation of the paroxysms, was often filled with the deepest grief.

§. 383. *Singular instance of this form of insanity.*

At the time of the French Revolution, a band of soldiers violently entered the above mentioned Asylum, under pretence of liberating certain victims, whom they asserted to have been unjustly confined there by the tyrannical authority of the French monarchs. They marched in arms from one cell to another, passing such, as were evidently insane. At last they came to a maniac, bound in chains, who arrested their attention.—“Is it not shameful (said he,) that I should be bound in chains, and confounded with madmen? It is an instance of the most

flagrant injustice."—He conjured the soldiers to terminate such oppression, and to become his liberators. The soldiers called for the governor of the Asylum, and presenting their sabres to his breast, demanded an explanation of his conduct in confining this man. The governor endeavoured to reason with them; he assured them, there are instances of madness, where there is no delirium, no failure of the reasoning powers; but to no purpose. The soldiers released the maniac, shouting, *Vive la Republique*. The sight of so many armed men, and their shouting suddenly brought on the ungovernable paroxysm. The madman flew upon his liberators; wrested his sabre from the nearest soldier, and commenced an indiscriminate attack. The soldiers, more convinced by their wounds and their apprehensions of danger, than by milder forms of argument, were glad to return him to the protection of the Asylum.

§. 394. *Sometimes induced by early excessive indulgence.*

This form of insanity appears in some instances to have a natural origin, like some of the cases of idiotism. That uncontrollable violence of the passions, which is its characteristic, is developed in the early periods of childhood, and indicates the existence of some inherent evil in the mental organization. In other instances, it does not make its appearance in early life, but is superinduced by long continued and excessive indulgence.—A child is found to have a violent temper; his parents, in the excess of a weak attachment, indulge his impetuosity; his passions gain strength; the will becomes subservient to them; and at last he is justly looked upon, as equally dangerous with any other maniac, and is consigned for safe keeping to a hospital.—It may be laid down as a truth, confirmed by what we know of our intellectual tendencies, also by many facts on record, that all persons, whose passions are permitted to run on without restraint, are rapidly approaching the state of most deplorable mental alienation. It is not the indulgence of one passion merely, to which the remark applies, but all.—The form of insanity, to which the re-

marks in this, and the two preceding sections, have relation, is otherwise known, as insanity of the WILL. But they are the same thing; with correct views of the mind, we cannot separate them. We always find the will, the mental choice or determination, coinciding with the preponderating motives. Inasmuch, therefore, as we have already seen, that nothing has, or can have the character of a motive, independently of the affections, it follows, that there is no act of the will, independently of a particular state of the affections, that is, of the passions. Consequently, the insanity of the affections or passions involves, and implies insanity of the will.

§. 385. *Of insanity with delirium.*

The insanity of the passions was characterized as insanity without delirium. We apply the term, delirium, as marking the species of mental alienation, when there is some derangement of what are distinctively termed the intellectual powers. In cases of delirium, the powers of perception, memory, imagination, reasoning, belief, &c. are all perverted. Not, however, in all instances in the same degree; and in some cases, the perversion and derangement extend only to a part of these susceptibilities, and perhaps only to one. — It is generally characteristic of delirious insanity, that it is attended with nervous excitement. The insane person is animated with strong emotions and passions, sometimes tending to great despondency, at others to gaiety or fury.

§. 386. *Of perception in cases of delirious insanity.*

In delirious insanity there is often a derangement of the powers of perception. The senses of taste, touch, smell, hearing, and sight may be all affected; but particularly the sense of sight.—In visual perception, all objects at first seem to touch the eye. Our estimate of distance by the sight is not an original, but an acquired perception. What we term perception of distance, therefore, always presupposes certain preceding acts of the mind. But in delirious insanity the power of judging is, in a great meas-

ure, and often, totally, subverted and lost. Hence the delirious man often mistakes in the perception of distance, and it is no uncommon thing to find him attempting to throw himself from the windows of an upper story, or down the brink of a precipice. Such attempts can be accounted for on no other supposition, than a mistake of sight, except in some instances of very violent paroxysms, or of a permanent inclination to self-destruction.—The same causes, which perplex their perceptions of distance, confuse their notions of extension, of the form of bodies, and of the outlines of any object of sight whatever. Hence delirious persons are found to experience great difficulty in reading a book, and often confound objects and persons. When a maniack mistakes a man for a horse, and tells the bystanders to keep on the look out, because the animal is untractable and given to kicking, the remark is not always to be regarded, as a mere madman's attempt at wit. It is well ascertained from the confessions of maniacs, who have recovered, and have remembered what passed in their delirium, that there may be a derangement of the visual perceptions so great, as to occasion such an absurd mistake.—They sometimes see objects and persons, which are not present. This fact may perhaps be explained in the same way, as those mental states, which we have termed apparitions. Hence madmen are, as they suppose, surrounded at times with demons, angels, bodies of armed men, &c. They declaim, put themselves in attitudes of defence, violently beat the air, cry out for help, gain victories; all occasioned by their disordered visual perceptions.

§. 387. *Of association in delirious insanity.*

In the form of insanity, which is termed DELIRIOUS, the law of association or suggestion is found to be greatly affected. Rapidity of association was given, as a characteristic of that form of partial insanity, which was termed lightheadedness or 'dementia.' But in delirium it often exists in a far more striking degree. In lightheadedness, the indirect power, which is retained and exercised by the will over trains of thought, is only diminished; in delirium

it is often wholly annulled. Every new object, every new countenance, every noise heard in the room, where the delirious person is, or noises, that are heard from without, indeed every thing, with which thoughts and feelings have been formerly associated, revives those ancient trains of mental acts. They are poured in upon him, like a flood; and it is easier to conceive, than describe what a tumultuous chaos the mind in such a condition must be. When we consider, that these uncalled for trains of thoughts are thrown in upon the maniac, when his system is in great nervous excitement, and that he is unable to resist or to regulate the instantaneous transference of the mind from subject to subject, it is no wonder, that he should exhibit much external agitation, wildness of countenance, violence of gestures, outcries, &c.

It is further to be remarked here, that the utter inability of the madman to control the train of associated thoughts is one cause of the perversion of the power of perception. It appeared in the chapter on Dreaming, (§. 215.) that when our conceptions of things are not susceptible of any guidance and control from the will, they have a tendency to take the place of, and appear to us much the same, as the original perceptions. This is one cause, why they mistake their mere thoughts for beings, the mere workings of the mind for external and local existences.

§. 288. *Illustration of the above section.*

The following account of the rapid mental transitions of an insane person in the New Bethlem Hospital, London, will go to confirm, and illustrate what has been said. Like all characteristic traits of insanity, it is a melancholy picture. Difficult as it is to conceive, that such an endless series of topics should be crowded into the mind in a space so short, it is only what is realized in all cases of delirious insanity, where a derangement of the laws of association is the prominent trait.—“Wholly unlimited by the identities of time, place, or person, he instantly accommodates

each to his fancy, and in a moment he is any where, and every where, and any body, by turns. At one time he imagined himself to be the Lord Chancellor, or, as he emphatically styled himself, 'Young Baggs;' and no mortal tongue ever maintained the loquacity of the law, or talked with more incessant volubility, than his imaginary lordship. He would decide ten thousand causes in a day; he would accuse, try, condemn, and execute whole nations in a breath. His language was as wild and far-fetched as his fancy was various; topicks of all kinds seemed to come tumbling into his mind, without order or connexion. Of every name he heard mentioned he instantly became the personal representative, and says, 'I am he;' thus he is by turns Bonaparte, the King, the Duke of Wellington, Lord Londonderry, the Persian Ambassador, Mr. Pope, Homer, Smollett, Hume, Gibbon, John Bunyan, Mrs. Clarke, the Queen, Bergami. He is successively a Hottentot, a Lascar, a Spaniard, a Turk, a Jew, a Scotsman. He has been in all situations and occupations of life, according to his own account; a potboy at Hampstead, a shoeblack, a chimney-sweeper, an East-India Director, a kennel-raker, a goldfinder, an oyster-woman, a Jew cast-clothesman, a police justice, a judge, a keeper of Newgate, and, as he styles it, 'His Majesty's law iron-monger for the home department:' nay, he has even been Jack Ketch, and has hung hundreds; he has been a soldier, and has killed thousands; a Portuguese, and poignarded scores; a Jew pedlar, and cheated all the world; a member of Parliament for London, and betrayed his constituents; a Lord Mayor, a bishop, an admiral, a dancing-master, a Rabbi, Grimaldi in the pantomime, and ten thousand other occupations, that no tongue or memory but his own could enumerate. The specimen just given may serve as a sample of what is passing in his fancy."

§. 389. *Of the effect of delirium on the power of belief.*

In men of sane minds we find great diversities in the susceptibility of belief. Whatever may be the cause of it,

it is very obvious, that the same circumstances extort a readier and stronger assent from some, than others. There are three classes of persons, in whom this faculty or susceptibility appears to be disordered.—(1) The first class are those, who seem incapable of believing any thing, which they are required to receive on the testimony of others. They must see it with their own eyes; they must hear it, or handle it for themselves; they must examine it by square, rule, and compass. They remind one of the Savage, who complained, when something was proposed for his belief, “that it would not believe for him.” The causes of this singular inability are worthy of more inquiry, than has hitherto been expended upon them. When it is very great, it is a mark of the approach or actual existence of idiocy.—(2) There is another class of persons, who plainly show a derangement of this power, by their readiness to believe every thing. No matter how incongruous or improbable a story is, it is received at once. They take no note of dates, characters, and circumstances; and as they find nothing too improbable to believe, they find nothing too strange, marvellous, and foolish to report. This state of mind is frequently an accompaniment of lightheadedness.—(3) The susceptibility of belief must of course be very much affected in delirious persons. They do not, and cannot rely upon the reports of the senses as evidence, as is done by men of sound minds. Being incapable of checking their thoughts, so as carefully to examine them, they do not have it in their power to estimate degrees of probability. And in this class, as well as in the first mentioned, that original tendency in our constitution, which leads us to repose with so much confidence on the testimony of our fellow beings as to matters of fact, which have come under their observation, seems to be obliterated. This, in general, is the condition of the power of belief in madmen.—There is, however, in some cases a peculiarity in this respect, which requires to be mentioned. In the instances, to which we allude, the predominating cause of the insanity consists in the mere tenacity of belief. That is, certain propositions, which are erroneous

and absurd, are received by the disordered persons as certain; and nothing can convince them of the contrary. One believes himself to be a king; another, that he is the prophet, Mahomet; and various other absurdities are received by them, as undoubtedly true. On all other subjects they appear to be rational; but their insanity is evident, as soon as their cherished errors are mentioned.— Something of this kind has already been mentioned, as existing in extreme cases of hypochondriasis. When delirium extends no further than a derangement of the susceptibility of belief, it cannot easily be distinguished from them; except that, in instances of hypochondriasis, there is a more fixed and decided melancholy feeling, and in general less nervous agitation.

§. 390. *Powers of reasoning in the insane.*

When the derangement is total, extending to all subjects, the powers of reasoning are gone; although sometimes a few propositions seem to be accurately connected together, perhaps by accident rather than otherwise. When it is partial, the ability of ratiocination remains. The insane man often appears rational, talks very well, and is known to be otherwise than of a sound mind, not by his conclusions, or his mode of connecting propositions, but by his premises.

§. 391. *Instance of partial insanity in the character of Don Quixote.*

CERVANTES has taken advantage of that condition of mind, which we term partial insanity, in laying the foundation of his entertaining work. The hero of his story is represented as having his naturally good understanding perverted by the perusal of certain foolish, romantick stories, falsely purporting to be a true record of knights and of deeds of chivalry. These books, containing representations of dwarfs, giants, necromancers, and other preternatural extravagance, were zealously perused, until the poor man's head was effectually turned. But, although he was

in a state of real mental derangement, it was limited to the extravagancies, which have been mentioned ; on other subjects he was rational ; and could his mind have been freed from its knight errant delusion, he would have been, without a greater celebrity than is possessed by a thousand others, a reputable citizen of his native village.

"In all his conversations (Bk. iv. ch. 23) and replies, he gave evident proofs of a most excellent understanding, and never 'lost the stirrups,' except on the subject of chivalry." On this subject he 'was craz'd.'

Bracing his shield, therefore, and brandishing his lance, he declares to his credulous attendant (B. iii. ch. 6.), that strange perils and vast adventures are reserved for him ; that he is ordained to re-establish the knights of the Round Table, and that his fame will exceed that of the Tablantes and the Olivantes.

When the barber and curate visited him on a certain occasion, the conversation happened to turn on what are termed reasons of state, and on modes of administration ; and Don Quixote spoke so well on every topick, as to convince them, that he was quite sound and had recovered the right exercise of his judgment. But something being unadvisedly said about the Turkish war, the Knight at once remarked with much solemnity and seriousness, that his majesty had nothing to do, but to issue a proclamation, commanding all the knights-errant in Spain to assemble at his court by such a day ; *and although not more than half a dozen should come, among these one would be found, who would alone be sufficient to overthrow the whole Turkish power.*

When the subject of conversation turned upon war, which had so near a connection with shields, and lances, and all the associations of chivalry, it came within the range of his malady.

In reading the book, to which these remarks have reference, if we keep in mind the true mental state of its hero, we shall see an admirable consistency in its narrations, and a truth to nature, which otherwise might not be observed.

§. 392. *Of quickness of thought and cunning in insane persons.*

Those, who have been personally acquainted with the intellectual condition of the insane, have sometimes observed in them great quickness of thought in some little emergencies, and an unusual degree of cunning. When, for instance, an attempt has been made to seize and confine them, they steadily and promptly mark the motions of their pursuers; they rapidly decypher their intentions from their countenance; and cause them no small degree of perplexity. This quickness and cunning may sometimes be noticed in those, who have no lucid intervals; but chiefly in those, who are only partially insane.

Persons, whose derangement originates in the reception and firm belief of certain erroneous propositions, often reason correctly from them. If the madman believes himself to be a king, he reasons right in requiring suitable homage, and in expressing dissatisfaction, when it is withheld. Further; they frequently discover more rapidity of thought, more fluency of expression, and even more exactness of deduction, than others of a perfectly sound mind, or than themselves could have exhibited before their derangement. This singular fact is to be briefly explained.

§. 393. *Causes of readiness of reasoning in the partially insane.*

The unusual powers of reasoning, which have been noticed in partially insane persons, may be referred to two causes.—There is, in the first place, an uncommon excitation of the attention, and of all the intellectual powers. They are not troubled with torpidness. Whatever is done, or asserted, is strictly observed by them.

There is, in the second place, a removal of those checks, which attend the sober and the rational in their reasonings.

Some of the checks, which retard the process of reasoning in the case of men, whose powers are in a good state, are these;—(1) A distrust of phraseology,—a fear

of mistakes from the ambiguity and vagueness of language.—The object of a rational man is supposed to be to arrive at truth, and not merely to gain a victory. He, therefore, feels anxious, not only to employ terms, which appear to himself proper, but which shall be rightly understood by his opponent. But the irrational man, as might be expected, does not find himself embarrassed with considerations of this nature.—(2) A second obstruction to facility and promptness in argumentation, in the case of the soberminded and rational, is this ;—They fear, that they may not be in possession of all those premises, on which the solution will be found in the event to depend.—Many disputes are carried on without previously forming an acquaintance with those facts, which are necessarily and prominently involved. While disputants of sound minds have any suspicion on this point, and know not but it will be labour lost, they of course feel their interest in the dispute very much diminished.—(3) The third circumstance, to which reference was had, is this ;—The influence of certain feelings of propriety and of good sense, which ordinarily govern men in the full exercise of their powers.—The disputant feels himself under obligations to profess a deference for his opponent ; it is due to the customary forms of society. He is sometimes restrained and embarrassed by what he considers due to those, who are present to hear the argument. He is particularly careful to say nothing foolish, absurd, or uncharitable.—All these things weigh nothing with the insane person. He is not troubled about exactness of expression, or the observance of ceremonies, but strangely rushes, as it were, upon the main points of the controversy, regardless of all minor considerations.

§. 394. *Effect of insanity on the memory.*

While the other acts of the mind, perception, and association, and reasoning are disordered, the memory does not remain unaffected. The past life of the delirious person, (we here speak of cases where the mental disorder is

not partial,) is an utter chaos. Such is the rapidity, with which thoughts crowd in upon him, that he is unable for this reason, if there were no other, to arrange, and classify, and refer them to their proper periods. He may remember for a few moments, perhaps for a few hours. He may revengefully treasure up some act of punishment for a much longer time; but this does not affect the truth of the general statement. The heterogeneous confusion of his own intellect, might be assumed, as a fit symbol of his notions of the great multitude of facts, which have taken place in the past.—See here then the picture of the mind, that noble fabrick, in the more formidable stages of delirium—the power of perception disordered in all its forms—the laws of association disturbed and torn from the guidance of the will—the susceptibility of belief perverted—the memory gone, and with it the world of the past—the power of reasoning, and with it the world of the future. This cumbersome mass of intellectual ruins is convulsed and rendered still more hideous, by the demoralization and unrestrained impulses of the passions.

§. 395. *Of momentary impulses inclining to insanity.*

There is sometimes a peculiar, but transitory state of mind, bordering on partial insanity, which deserves a mention here; although it is experienced in persons, who are sane. It is a strange propensity in a person to do in certain situations those things, which, if done, would clearly prove him deranged. The instances of these very sudden and singular impulses are probably not numerous.—As an illustration, a person of a perfectly sane mind acknowledged, that whenever he passed a particular bridge, he felt a slight inclination to throw himself over, accompanied with some dread, that his inclination might hurry him away.

§. 396. *Causes of the insanity of delirium.*

Some of the causes of idiocy were mentioned in a former section; something is to be said of the causes of the mental alienation or insanity of delirium; although there is

much ground for considering them essentially the same, inasmuch as delirium often terminates in idiocy.—The causes of delirious insanity are of two kinds, MORAL, and PHYSICAL.—All diseases, which violently affect the physical system, such as epilepsy, fevers, & apoplexy, also injuries of the brain, &c. indirectly affect the mind, and may cause permanent delirium.—It is worthy of remark also in regard to this form of mental alienation, that it is in some degree hereditary; hence it is often said of particular families, that they are predisposed to insanity. The father, son, and grandson have not only been known to become successively insane, but the derangement has sometimes taken place in each case, in the same year of their life.

There are various moral causes of mental alienation.—It has been caused, among other circumstances of a moral nature, by disappointed ambition. Disappointment in mercantile and other speculations, and in any ardent expectations whatever, often has the same effect. Erroneous religious opinions, great excitements of feeling on religious subjects have contributed towards supplying lunatick hospitals. An unrestrained indulgence of any of the passions is found to be attended with the same results.

We find a fruitful source of mental derangement in the vicissitudes of political events. A recent writer in a French medical journal says, that he could give a history of the political revolutions in France from the taking of the Bastille, down to the return of Bonaparte from Elba, by detailing the causes of certain cases of insanity.—It appears from reports from insane hospitals, that moral causes of insanity are more numerous, than physical. But in many cases the influence of both is combined together.

§. 397. *Of moral accountability in mental alienation.*

It is in some respects a difficult question, Whether men, who are in a state of mental alienation, are morally accountable—Whether they are subjects of merit or demerit? And if so, in what cases, and how far?—In determining this question, there ought to be a distinction made

between cases of insanity from mere melancholy imagination, or from confirmed hypochondriasis, and those of total delirium. In the last, there is evidently no accountability. In the former instances, a judgment should be formed from the circumstances of the particular case under consideration; and also in all cases, where there is a mere derangement of the associating principle, so far as to constitute a person light-headed or flighty. The same must be said of the insanity of the passions.

This, however, may be laid down, as a general rule in respect to some of the aspects of insanity; and perhaps it is the only one, which can be; viz. Insane persons, whether their insanity arise from original deficiency and weakness in the ordinary mental powers, or from delirium, are not to be considered accountable, are not subjects of praise or blame, whenever it appears, that such deficiency or delirium extends to, and annuls the power of judging.— And this is the case with all persons, who are the subjects of total insanity.—When the insanity is partial, it would seem to follow, therefore, that the first inquiry should be, whether the action committed comes within the range of the malady. For a person, who is insane on one subject merely, will probably be found to labour under a perversion of judgment in respect to that particular subject, no less than if the delirium were total. Consequently, a distinction may be justly set up, although it will require much caution in doing it, between those actions, which can be clearly found within the limits of the person's insanity, and those, which evidently fall without it.

§. 398. *Of the imputation of insanity to individuals.*

While the existence of insanity, so far as materially to affect the powers of judging, takes away accountability in whole or in part, it affects proportionally the relations, which the subjects of it sustain to society. In all well organized communities it will be found to follow from the terms of the civil compact, that those, who exercise sovereignty, are bound to afford protection to the citizen in general, & to in-

dividuals in particular, in certain cases. Hence they will be found to have taken precautionary measures, the nature of which all are acquainted with, to protect the community against the injuries, which insane persons might commit, and also to alleviate that unhappiness, which they necessarily bring, in a greater or less degree, on themselves and families.

Accordingly it is implied in the imputation of insanity to individuals, by an act of the civil authorities, that the insane person is deprived of that ability of self-government, which is the common allotment of men; that the strong bonds of friendship, of family, and of country, which once kept him in his appropriate station in society, are loosened; and that he must find, in the substitution of the will and guardianship of the State, that oversight and protection, which he has lost by the alienation of his own. While all must admit the propriety of this course, where the circumstances of the case justly demand it, it must be conceded, that nothing can be more solemn and affecting, than such a publick imputation of derangement, which, whether just or unjust, practically annihilates the civil and social character of man, and seals his degradation in these respects. It is a right, therefore, which ought not to be exercised but upon good ground, and the exercise of which ought to be understood to require, and to imply a correct acquaintance with this difficult, but practical and important subject. And the more so, because there have been depraved individuals, who have endeavoured to fasten the charge of insanity upon others from some interested motives,—in order to gratify malignant passions, or to control their persons, or property. A suitable protection against the designs of such is to be had, not merely in the integrity of those, who are to judge in these cases, but in their acquaintance with the laws and tendencies of the mind.

Before leaving this topick, one suggestion further remains. In forming an opinion as to the mental alienation of an individual, not only those particular facts are to be considered, which are supposed to indicate insanity,

but they are to be estimated, in connection with constitutional traits of character. That rapidity of association, that gay and heedless transition from subject to subject, which is natural in one, and occasions no surprize, would be regarded in another, as a positive indication of the disturbance of the mental powers.

§. 399. *Of the treatment of the insane.*

In closing this view of mental maladies, it is proper to make some suggestions on the treatment due to those of our fellow beings, who are thus afflicted. It is no uncommon thing to see them treated with unkindness. Although they may not, in general, so readily perceive and so intensely feel, as others, the injuries they receive, any cruelty of treatment towards them is very unjustifiable in the authors of it.

It is wrong on the general principle, that we are bound, not to cause and increase suffering unnecessarily in any case whatever, even in the animal creation. The poet, Cowper, uttered the sentiment of all kind and honourable men, when he declared, he would not reckon in his list of friends the man, who should needlessly set foot upon a worm.

It is wrong also, on the principle, that we should do to others, as we ourselves wish to be done by. —The person of an alienated mind may not be able to reason on the subject of what is due to him, but those, who possess rational powers, can. They cannot fail to see the application of the Scriptural principle, which has been mentioned, in the present instance. All persons whatever are subject to these mental evils; and it is presumed, that no one would be easy in the anticipation of being left without care and assistance from others, when he should be unable to take care of himself. If, therefore, we take the ground, that persons in the state of idiocy, or of delirium, or of any of the forms of mental alienation, are not entitled to care and kindness, we are possibly treasuring up for ourselves a retribution of a similar fearful character.

Again ; ill treatment of cases of this kind is a tacit reflection on the Supreme Being, which we cannot, without great self-ignorance, imagine ourselves authorized to make. He has in his wisdom permitted them to exist, as memorials of human weakness, and as useful commentaries on pride of intellect ; and perhaps also to give us an opportunity of exercising the noble virtues of charity and humanity. We are, therefore, bound to receive the instructions they impart, and to exercise the virtues, which they give us an opportunity of exercising ; otherwise, we cast contempt on Him, whose almighty hand orders the distinctions, and distributes the allotments both of bodily and of intellectual life.

NOTE.—The subject of insanity in its various forms is so intimately connected with human happiness, that it could not fail very early to arrest attention. Medical writers in particular had abundant occasion to notice the causes and circumstances of its developement. A numerous catalogue of them have made it the subject of their remarks. And while it was their prominent object to prevent or to alleviate one of the sorest maladies, which it is the lot of human nature to suffer, they have indirectly thrown light on the whole field of the philosophy of the mind.

Where so many have written, it would be some labour to make out a full list, and a weightier and more responsible task, to discriminate their respective merits. Without, therefore, presuming to undertake it, we merely embrace this opportunity to mention among others, as writings that may be read with advantage, M. Pinel's Treatise on Insanity, Rush on the Diseases of the mind, and the articles on the subject of mental alienation in the *DICTIONNAIRE DES SCIENCES MEDICALES*. There is in these writings an aptness of illustration, a philanthropick eloquence, a spirit of philosophy, which can hardly fail to interest and instruct.

CHAPTER THIRTY FIRST.

ORIGIN OF PREJUDICES.

§. 400. *Of the meaning of prejudices.*

In forming our judgments or opinions of things, we are led to take into consideration a variety of facts and circumstances, which are applicable to the particular subjects under consideration, and are fitted to influence the mind in the formation of such opinions. The circumstances and facts, which are thus fitted to influence our belief, in consequence of giving new views in respect to the subjects before us, are commonly termed EVIDENCE.—PREJUDICES, to which we are now to attend, are judgments or opinions, which are formed without a suitable regard to the evidence, properly pertaining to them. Whenever, for example, sources of evidence, which are within our reach, are overlooked; or when the facts and incidental circumstances constituting the evidence are allowed to have too great, or too little influence. A mind, which discovers a tendency thus to overlook or misapply grounds of evidence, is called a prejudiced mind.—A greater or less degree of importance will be attached to this subject, according as we attach a greater or less degree of value to the possession of correct and enlightened opinions. None can consider it unimportant; many will justly regard it, as of the very highest importance. It is the object of this chapter to point out some of the principal sources of prejudices.

§. 401. *Of constitutional prejudices.*

The formation of opinions without a suitable regard to the evidence may sometimes be attributed to something in the constitution; to some original weakness or obliquity in

the mental character ; as in the following instances.—Some person's mind appears to be limited in their range ; they are incapable of taking in, and retaining, and comparing a number of propositions at once. Inasmuch, therefore, as they are incapable of doing this, and must, consequently, let many facts and incidents go without proper examination, they are led to adopt and cherish opinions on other grounds, than a suitable regard to the evidence. Such opinions, although those, who maintain them, may be thought to be less culpable than many others, are rightly considered prejudices.—Another class are those, who are naturally too credulous ; who are ready to receive every thing for truth, which has even the slightest degree of evidence in its favour. It seems to be altogether impossible to induce them to pause, to examine, to compare, to reflect. They readily believe whatever they read, or hear asserted, until they find it contradicted ; and then they adopt some other opinion as readily and on as slight ground, as they adopted the first, which they retain no longer than they are met with, and driven about by the next wind of doctrine.—Other persons are of a temper nearly the reverse ; they are naturally obstinate, and contentious, and are unwilling to receive any thing, that is proposed for their belief, however reasonable it may be. Consequently their opinions, so far as they are the opposite of those, which have a higher degree of evidence in their favour, are prejudices. And this is the case with very many of them.—Erroneous opinions of this kind, which can be traced back to some peculiarity originally inherent in the mind, may be termed constitutional prejudices. When such constitutional defects are excessive, and disqualify the subjects of them for the ordinary concerns of life, they are considered as coming within some of the multiplied forms of insanity. (See §. 389.)

§. 402. *Of prejudices in favour of our youth.*

Many of those opinions, which we form of the scenes, and events, and characters of our youthful days, are preju-

dices. As we look back and frame an estimation of that early period, the associates of our childhood and youth seem to us to have been without a crime; the interests of parents were never at variance with those of their children; masters sought the good of their dependants; the poor were fed; magistrates were virtuous; the religious teachers were eminently holy men. Alas, for these evil days of our manhood and old age, in which there is such rottenness in all civil institutions, that have been changed, such corruption in every new set of magistrates, and such depravity in the great mass of the people! The causes of this apparent disparity between the world, as it exists now, and formerly, are briefly these.—In the morning of life every thing is new; our attention is arrested by a multitude of novel objects, and the mind is filled with delight. Happy ourselves, we imagine, that, with few exceptions, all others are not less so; and while our own hearts are conscious of innocence, we are exempt from any suspicion of crime in others. In a word, we suppose all the world to be happy, all the world to be innocent and just, because we are conscious of the existence of rectitude and truth and innocence in ourselves, and are too unexperienced to be aware of the frequency of their absence from the great mass of mankind. As we grow up, cares multiply; bodily infirmities increase; we more often see collisions of interest, hollow professions, deceptive expedients, and intriguing arts of all kinds; and what is worse, we discover in our own breasts more of distrust, jealousy, passion, and other evils, than had been developed in our earlier days.—The true solution then is this; We attribute to one thing what belongs to another. We ascribe to the great mass of mankind changes, which have only taken place in ourselves.—The world appears to us differently from what it did when we were young, not because it has itself essentially altered, which can never be supposed to have happened in the period of a single life of man; but because we, as individuals, have become more acquainted with its true character, and are made more sensibly to feel the pressure of its many ills.

It has been by means of this prejudice in favour of our youth, that a permanency has often been communicated to political institutions, to which they were not entitled by their intrinsic merits. It has often excited surprise in the historian, that forms of government, which were unjust in their operation, expensive, and every way defective, have been sustained without a murmur, and even loved and venerated by those, who have chiefly experienced their evil results. It is the same government. (and if it be a monarchy, the same administrators of it, or their lineal descendants,) which existed, when they were young. They then loved it, because they neither understood, nor felt its defects, and because at that period every thing was new, and interesting, and lovely. The attachments then formed continue, at least till manhood; and then it is too late with the greater part of mankind to throw off old affections, and to form the mind to the love of a new and better order of things. And thus, in consequence of the mental blindness, superinduced by prejudices of this sort, errors are perpetuated, gross abuses are too patiently borne, and each generation entails an inheritance of wretchedness on the succeeding.

§. 403. *Of prejudices of home and country.*

There are prejudices in favour of one's native country and of the village, where he may happen to have been brought up, and to live. And this prejudice in favour of one's own residence and nation is too often attended with a contempt and dislike of those, who have their origin elsewhere. It is notorious, that two of the most powerful and well informed nations on earth, the French and English, have for a long series of years affected to despise, and have most certainly hated each other. The French and Spaniards, who also are near neighbours to each other, have hardly been on better terms. The Italians, flattered by the eminent success of some of their countrymen in the arts, term the Germans blockheads; while the Germans get their satisfaction by bestowing the same appellation on the Swiss. Even the poor and ignorant Greenlander has

his grounds of triumph; and amid his rocks and snows fondly imagines, that there is no home, no freedom like his.

Different explanations may be given of the origin of this strong attachment to our nation and the place of our residence, and of the contempt, which is often entertained for others. Whatever explanation may be adopted, the existence of such feelings is well known, and their influence in perplexing our judgments of men and things extensively felt. This is seen in the criticisms, which are made by the authors of one nation on the productions in literature and the arts of another. With the Englishman, Montesquieu is superficial and dull; with the Frenchman, Newton dwindles down to a mere almanack-maker; in one country a writer is extolled on account of the place of his birth, and in another is decried and put down for the same reason. — It is important to all to be aware of the tendency to form erroneous opinions in consequence of these predilections and antipathies. A mind well balanced, and anxious to know the truth and to do equal and exact justice to all, will carefully guard against it.

§. 404. *Professional prejudices.*

Some erroneous opinions may be attributed to men's professions or callings in life. A little self-examination will convince us, that our feelings are apt to be unduly enlisted in favour of those, who are practising the same arts, pursuing the same studies, engaged in the same calling of whatever kind. When at any time it falls to us to discriminate between such, and persons of another art or calling; to determine which has the greatest merit, or is the deepest in crime, there is no small difficulty in becoming entirely divested of this feeling. It continually rises up, even when we seem to be unconscious of it; it gives a new aspect to the facts, which come under examination; it secretly but almost infallibly perplexes the decisions of men, who have the reputation of candour, and who would be offended at the imputation of intended injustice.

The causes of prejudices, arising from particular pro-

essions in life, are undoubtedly much the same, as those which are at the bottom of the partial sentiments, which people entertain of their own home and country. There is something in our constitution, which leads us to feel a deep interest in those, with whom we are much associated, whose toils are the same, who have the same hope to stimulate, and the same opposition to encounter. Besides, our own selfish feelings are at work. Our honour, and consequently, our respectability are in some degree involved in that of the profession. As that rises or falls, individuals experience something of the elevation or depression.

Under this class of prejudices may be reckoned those, resulting from that contraction and halting of the mind, which is often superinduced by an exclusive attention to one class of subjects, or to one train of thought. When a man, who has been taught in one science only, and whose mental operations have consequently been always running in one track, ventures out of it, and attempts to judge on other subjects, nothing is more common than for such an one to judge wrong. It is no easy matter for him to seize on the true distinctions of things beyond his particular sphere of knowledge; and he mistakes not only in respect to the nature of the things themselves, of which he is to judge, but also as to the nature and rules of the evidence applicable to them.—An eminent mathematician is said to have attempted to ascertain by calculation the ratio, in which the evidence of facts must decrease in the course of time, and to have fixed the period, when the evidence of the facts, on which Christianity is founded, shall become extinct, and when, in consequence, all religious faith must be banished from the earth.

§. 405. *Prejudices of sects and parties.*

In religious sects, and in political or other parties, prejudices are still stronger, than those of particular arts and professions. In sects and parties there is a conflict of opinions, and not of trades; a rivalry of principles, and not of mere labour and merchandize. It is, therefore, an active, an aspiring competition. Too restless to lie dor-

mant, it is introduced in high-ways, and workshops, and private and publick assemblies ; too ambitious to be easily overcome, it continually renews and perpetuates the conflict. The prejudices, therefore, of sects and parties have all the elements of professional prejudices, embittered by constant exercise. They convulse nations ; they disturb the peace of neighbourhoods ; they break asunder the strong ties of family and kindred.

The history of every republick, not excepting our own, affords abundant instances of the putting forth of these virulent and ungenerous tendencies. We do not mean to say, that a man cannot belong to a party without being prejudiced ; however difficult it may be, to be placed in that situation without being tinctured with those feelings. But wherever they actually exist, they deaden every honourable sentiment ; they perplex every noble principle. Nothing can be clearer evidence of this, than that we continually behold men of exalted patriotism, and of every way unsullied character, traduced by unfounded imputations and charges ; and which are known to be so by those political opponents, who make them. And it is a still more striking illustration of the strength of party prejudices, that we find the same political measures, advocated or opposed by the same men, as they happen to be in, or out of office ; or as the measures in question happen to be advocated or opposed by the members of the other party. As if the men, and not measures ; as if places, without regard to principles, were to be the sole subject of inquiry. — The prejudices of sects have been no less violent than those of political parties, as may be learnt from the hostility which is yet exercised among them, and from the history of former persecutions and martyrdoms. Even philosophy has not been exempt ; different scientifick systems have had their parties for and against ; and the serious and dignified pretensions of philosophick inquiry have not always preserved them from virulent contentions, which were not merely discreditable to science, but to human nature. We are told in the histories of philosophical opinions, that the controversies between the Realists and Nominalists ran so high, as to end

not only in verbal disputes, but in blows. An eye-witness assures us, that the combatants might be seen, not only engaging with fists, but with clubs and swords, and that many were wounded, and some killed. Not a very suitable way, one would imagine, of deciding an abstract, metaphysical question.

§. 406. *Prejudices of authority.*

Men often adopt erroneous opinions merely because they are proposed by writers of great name. The writings of Aristotle were upheld as chief authorities for a number of centuries in Europe, and no more was necessary in support of any controverted opinions, than to cite something favourable from them. The followers of Des Cartes received hardly less implicitly the philosophical creed of that new master of science; not so much because they had investigated, and were convinced in view of the evidence before them, as because Des Cartes had said it. There have been teachers in religion, also in politicks & other subordinate departments of science, who have had their followers for no better reason. Such prejudices have been a great hinderance to free discussion and the progress of knowledge.

The influence of authority in giving a direction to people's opinions is not limited to persons, who can truly make pretensions to some superiour wisdom; it is also frequently exercised by mere riches, titles, outward splendour. This is often seen in republican states, where the people have the right of choosing their rulers, and of expressing their opinions on a variety of publick questions. It is well, if not more than half of the people in any of the smaller corporations do not, in giving their suffrages, fall in with the sentiments, however absurd, of a few individuals, whose riches enable them to make a somewhat greater figure than their poorer neighbours. But this is a very unreasonable prejudice. The poorer classes of the community, inasmuch as they have but a small amount of property to boast of, ought at least to show in all cases, where they are at all capable of judging, that they have understandings, and possess and value freedom.

§. 407. *Prejudices of careless and indiscriminate reading.*

It has been remarked by men of careful observation, that those, who apply themselves most eagerly to reading, and do not combine with this practice a very considerable degree of caution and discrimination, are often led into a great number of errors. As they never pretend to examine and to weigh subjects carefully, their minds can be justly thought to be no better than a mere bundle of prejudices, although they may be of a less tenacious kind, than those arising from other sources. If their author happens to be in an error, which is very probable, as they take little or no pains in the selection of books, they have no way of avoiding it. Their only remedy is continual reading, which increases the evil; like travellers, gotten into a wrong road, who are less likely to arrive at the place of their destination, the further they advance.

Although many ideas are to be derived from books, and it would be no less unwise than unprofitable to throw them aside, they are not to be consulted to the neglect of our own invention and of that effort, without which there cannot be a well furnished, and well disciplined mind. It is easier to read than to meditate; and he, who reads merely or chiefly because he has an aversion to thinking, may be a book-worm, and even be thought to be learned, and yet be far from reaping the full benefit, which he might receive from his intellectual powers.

§. 408. *Prejudices of presumption.*

It must be admitted, that there is a difference in men's understandings, that some, where the education has been the same, appear to have naturally greater intellectual parts, than others. Those, who are thus originally favoured above their competitors, are too apt to presume on such superiority, and to trust to their genius, where care, patience, and labour would be much better auxiliaries. Such men, who imagine, that their minds will not only be furnished with spontaneous materials, but regulated by a spon-

taneous and infallible discipline, may impose upon the ignorant, but they make but a poor figure in the presence of learned and discerning persons. They will perhaps be found to have ideas enough, but there will be less prospect of their being suitably defined, compared together, and adjusted. We could not expect this with any better reason, than we can anticipate, that stones and timber, the spontaneous products of nature, will of themselves, without labour and art, be arranged together into well constructed and convenient piles of buildings.

§. 409. *Prejudices of enthusiasm.*

ENTHUSIASM always implies some object, which the mind judges good and desirable, but the pursuit of which is attended with a strong excitement of the feelings. In genuine enthusiasm the ardent feeling, which is exercised towards the object of pursuit, is supposed to be excited by that object exclusively, and to be free from any mixture of selfishness. So that this trait is in general an exalted and noble one, although sometimes attended with effects, which it is necessary to guard against. There may be enthusiasm in literature, politicks, religion, the arts, war, &c.

Persons under the influence of enthusiasm are subject to prejudices; that is, they form opinions without a cautious and suitable examination of all those facts and circumstances, which properly pertain to them. They are urged forward by too violent an impulse to permit them to stop and to analyze; many objections, which come in their way, are overlooked or disregarded; while every thing, that is favourable to the objects before them, is made to assume an exaggerated importance. The glow of feeling, the impetuosity of the passions is made to take the place of cool and well-founded decisions.—The scenes of the French Revolution illustrate the prejudices of enthusiasm. The object, which the principal actors had in view, the establishment of freedom in France, was a good one. But hurried away by an excessive zeal, they magnified the dangers, which threatened them; while celebrating the rights

of man, they violated the plainest principles of justice ; by arbitrary, capricious, and cruel acts they made even despotism itself desirable ; and in the end, after great sacrifices and efforts, effectually defeated their own object.

It should be added, however, that the evils of enthusiasm are in general felt, only when it is excessive. A moderate share at least seems to be necessary, in overcoming the difficulties of all great undertakings.

§. 410. *Prejudices of superstition.*

SUPERSTITION, as the term is commonly employed, implies an excessive susceptibility of belief, arising from, or superinduced by fear. We do not often speak of a person as superstitious, unless we observe in him these two characteristic, excessive timidity on some subjects, combined with too great readiness of faith in respect to the same. The term, therefore, may be applied to the idolatrous worship of the heathen ; to many of the mythological and other traditions of nations ; to the belief in witchcraft and magick ; to a regard for omens, whether of a political, religious, or domestick significancy ; to an inordinate attachment to mere forms and ceremonies of whatever kind ; to any object or subject whatever, where fears may be enlisted, and where belief follows chiefly in consequence of such fears.

The prejudices or erroneous opinions from this source have been exceedingly numerous. It is superstition, which, much to the disturbance of men's happiness and to the hinderance of the progress of the truth, has peopled the world with fairies and satyrs, with hypogriffs and dragons, with witches and centaurs, with the host of mythological deities, with marvellous sights in the sky, and with unknown sounds and voices on earth. There is no end to the catalogue of what may be seen, and heard, and believed by men under its influence.—In the consulship of Posthumius Albus and Furius Fusus, “ the sky, (says the historian, Livy,) appeared as on fire in many places, and other portents either occurred to people's sight, or were formed by

terror in their imaginations." (Bk. III. §. 5.)—"Before sun-setting, (says Josephus,) chariots and troops of soldiers in their armour were seen running about among the clouds, and surrounding of cities. Moreover, at that feast, which we call Pentecost, as the priests were going by night into the inner Court of the Temple, as the custom was, to perform their sacred ministrations, they said, that, in the first place, they felt a quaking, and heard a noise, and after that they heard a sound as of a great multitude, saying, Let us remove hence." (Jewish War, Bk. vi.)

§. 411. *The prejudices of superstition contagious.*

Of all the sources of prejudices, which exist in the mind, superstition seems to be the most contagious. When once fairly started, it rapidly goes from house to house, from village to village; and sometimes infects whole provinces. This was remarkably the case in the witchcraft delusions, which prevailed in New England about the year 1680; and all history affords instances, where this rapidity of infection has been experienced. When the superstition is thus extensive, there is a constant reciprocal action and reaction of the minds contaminated with it; and the evil is in this way greatly increased.—In the year 1812, the freedom of the whole state of Venezuela in South America came near being lost by the contagious influence of the prejudices arising from this cause. In the early part of that year a most violent earthquake was experienced, which was attended with very considerable injury to many large towns, and with the destruction of nearly twenty thousand persons. As this calamity happened on the day and hour of a great religious festival, it was interpreted by those, who were not favourably disposed towards the existing order of things, into a divine judgment, a manifestation of the displeasure of the Almighty at the wickedness of the people in attempting to secure their liberty. This idea was readily seized by the mass of the inhabitants, who were at that time ignorant and credulous. They joined in great numbers the Spanish army, that was acting against the re-

publick ; the patriots became discouraged ; and after being defeated in a number of battles, Venezuela was again brought under its ancient masters. This disastrous result was owing to the prejudices of superstition.

§. 412. *Of superstition in times of distress and danger.*

The fact above-mentioned leads us to observe, that in all times of distress and danger the creations of a superstitious mind are greatly multiplied. Fear is one of the appropriate elements of such a mind ; and when difficulties and dangers thicken around it, nothing can surpass the degree of its excitement. Under the influence of the excitement of such dark periods, it notices many things, which at other times would not have attracted attention. A violent thunderstorm, which in times of tranquillity and peace, would have been unnoticed, has an ominous significancy in periods of revolutions and wars. The flight of birds, the blowing of the winds, the rise and fall of the tides, the motion of the clouds, the darting of meteors, any of the commonest natural appearances arrest, and fill with astonishment the minds of the superstitious at such seasons.

§. 413. *Prejudices of personal friendships and dislikes.*

If man were to choose a state of apathy and indifference, he would be unable to obtain it, at least permanently ; it would be refused to him by the very elements, the original laws of his nature. He is destined not only to act, but to feel ; and his feelings in respect to others will vary, according as he has been more or less in their company, as he has received from them greater or less favours or injuries. Hence he has his sympathies and his dislikes, his favourable and unfavourable sentiments, his friends and his opposers. And here we have another source of prejudices. It is so well understood as to have become a common saying, that it is a difficult matter to judge, with perfect impartiality, either of friends or foes. A question arises, we will suppose, concerning the merit or demerit, the right or wrong in the conduct of a friend ; of one, in whose

favour our sympathies are strongly enlisted. In the deliberation upon the facts before us, which we attempt to hold, the mind is continually interrupted by the remembrance of those kind acts and excellent qualities, which have laid the foundation of our favourable partialities. They come before the eye of the judgment; we attempt to remove them, and they return again; they interrupt and cloud the clearness of its perceptions. And, hence, our judgments prove to be wrong.

We experience the same difficulty in forming a just estimate of the character and conduct of those, for whom we entertain a personal dislike.—There is a continual suggestion of acts and of qualities, which are the foundations of that dislike. The effect of this is partly to divert the mind from the question properly before it, and partly to diffuse over it a misrepresentation, which has its origin solely in our own feelings of antipathy. Our dislike interposes itself, as in the other case, between the thing to be judged of, and the susceptibility of judging, and renders the mind unable to perceive so clearly the true merits of the question, as it otherwise would.

And here it may be further remarked, in connection with these views, that sympathy for sorrow, that the feeling of compassion for persons in distress has a tendency to perplex the judgment. It is true, that the perplexity and error of judgment in such cases is an amiable prejudice, but it is not less a prejudice. How often people undertake the defence and justification of those, who are unfortunate and distressed, merely from feelings of sympathy! Afterwards when their cooler reason is permitted to decide, they learn to their mortification, that the subjects of those chivalrous feelings and partial judgments were altogether unworthy of such unreflecting kindness.

§. 414. *Prejudices of custom or fashion.*

The practices of different nations, and the prevailing notions in respect to them, differ from each other; nor are those of the same nation the same at different periods.—

The modes of salutation in France are different from those of Russia; and those of both nations are different from the forms, which are commonly received in Oriental countries. There is no less diversity among nations in the fashions of dress, than in the methods of civility, and of polite intercourse. The dress of a Turk or of a Chinese would make but an ill figure on an Englishman; and the Englishman himself would reject with contempt the obsolete and neglected fashions of his own ancestors.—The authority of fashion extends also to political and religious ceremonies, to the regulation and management of domestick affairs, and to methods of education. No two nations are alike in all these respects; and hardly one age, or one year agrees with another.

We find in the authority of fashion or custom a fruitful source of limited and erroneous judgments. Each nation passes its censure on the customs, that prevail abroad, but are not adopted at home; each age ridicules the practices of a preceding age, that have since become obsolete. We have great reason for considering these limited and premature judgments prejudices. We see no grounds, why one nation, especially where there is nearly an equal degree of mental improvement, should set itself up as an infallible judge of propriety and impropriety in the customs and ceremonies of another nation.—But the fallacy consists not merely in ignorantly censuring others. The great body of people are found to be not more unanimous in censuring the opinions and fashions of other ages and nations, than they are, in blindly and implicitly adopting those of their own, however trivial or absurd they may be. They do, as they see others do; this method they have followed from their youth up, without exercising their own judgment; and in this way custom has become to them a 'second nature.'

Some respect is due undoubtedly to the sentiments of the great mass of people around us, although those sentiments are acknowledged to be prejudiced. A sudden and indiscriminate breaking off from all their practices is not to be recommended. But then a greater respect is due to

truth, justice, and conscience ; something may be sacrificed to the weaknesses of human nature, but more must be given up to its nobler elements.

§. 415. *Correctives of fashionable prejudices.*

“Three things, (says Watts,) are to be considered, in order to deliver our understandings from this danger and slavery.

1. That the greatest part of the civil customs of any particular nation or age spring from humour rather than reason. Sometimes the humour of the prince prevails, and sometimes the humour of the people. It is either the great or the many, who dictate the fashion, and these have not always the highest reason on their side.

2. Consider also, that the customs of different nations in different ages, the customs of different nations in the same age, and the customs of different towns and villages in the same nation, are very various and contrary to each other. The fashionable learning, language, sentiments, and rules of politeness, differ greatly in different countries and ages of mankind ; but truth and reason are of a more uniform and steady nature, and do not change with the fashion. Upon this account, to cure the prepossessions which arise from custom, it is of excellent use to travel and see the customs of various countries, and to read the travels of other men, and the history of past ages, that every thing may not seem strange and uncouth, which is not practised within the limits of our own parish, or in the narrow space of our own life-time.

3. Consider yet again, how often we ourselves have changed our opinions concerning the decency, propriety, or congruity of several modes or practices in the world, especially if we have lived to the age of thirty or forty. Custom or fashion, even in all its changes, has been ready to have some degree of ascendancy over our understandings, and what at one time seemed decent, appears obsolete and disagreeable afterward, when the fashion changes. Let us learn, therefore, to abstract as much as pos-

sible from custom and fashion, when we would pass a judgment concerning the real value and intrinsic nature of things."

§. 416. *Prejudices of mental indolence.*

The catalogue of prejudices may be yet further increased; it would be no easy matter to give a perfect enumeration of them.—Men often take up with erroneous sentiments, and expose themselves and others to all the ill effects of such wrong opinions, rather than submit to the mere labour of a thorough examination of them. These are prejudices of MENTAL INDOLENCE.

The mind, in the early part of life, exhibits much activity; every thing, that is novel, arrests its attention; and at that period all objects possess something of that character. After the fervour of youth has passed, this activity generally ceases; the soul, no longer stimulated by the excitement of novelty, seeks repose. To doubt leads to inquiry; inquiry is laborious, and, therefore, painful; and the resolution is, consequently, taken to harbour no doubts, to ask no questions.

This resolution, so fatal to the progress of the truth and to all right views, is sometimes taken for another reason. Inquiry, and the suggestion of doubts on all long established opinions are extremely distressing to those, who have not been in the habit of careful and exact investigation; and who have, therefore, no well settled and satisfactory views as to the powers of the mind, and the nature and degrees of evidence. To tear them from their ancient opinions is like the separation of old friends. It is in itself exceedingly trying; but there is a distress more poignant than that of the present moment, in the vacillation, the tossing to and fro of the mind, which for a long time succeeds.—Men have been frequently induced by the experience of this unpleasant state of mind, which results from their previous neglect to examine and to form opinions with care, to give up inquiry altogether. They become unwilling to have their mental slumbers disturbed;

preferring a quiet adherence to their long adopted belief, however erroneous it may be, to the endurance of the perplexing uneasiness of that state of skepticism, which intervenes between the rejection of old opinions and the formation of new.

§. 417. *Of the methods of subduing prejudices.*

It is no easy task fully to remove prejudices, especially where they have been of long standing. But in some cases we cannot decline attempting it, without evidently neglecting a duty, owed to a fellow-being. In the discharge of this difficult, but important duty, the following directions will not be without use.

(1) In attempting to subdue the prejudices of others, a scrupulous regard is to be had to their feelings.—It is implied in the very attempt to subdue a prejudice, that the views in respect to that particular subject, which we ourselves entertain, have the greater degree of correctness; but even this implied superiority is not unnecessarily to be obtruded on the prejudiced man's attention, but rather to be kept out of sight. The poorest man has his treasures of self-love, the most ignorant and prejudiced man has his pride of intellect; and if that self-love or that pride of intellect be offended, in vain will be all attempts at a reduction of their erroneous notions. So that a regard to the feelings and even the weaknesses of those, whose opinions we controvert, is due not more to the general claims of humanity, than to the success of the particular object, which we have in hand.

(2) Having by all suitable means conciliated the prejudiced man's feelings, the wrong sentiments, which he cherishes, may be attacked by direct argument. They may be shown to be ill founded by reasoning, conclusively deduced from propositions so plain and just, as to be admitted by both parties. This perhaps will answer the purpose, where the prejudices have not been of very long continuance, and have not acquired a great degree of strength.

(3) Where they are found to be very tenacious, another course is thought to be preferable. Let no direct attack be made upon the prejudice, which is to be opposed, but let it pass with as little immediate notice, as possible. Efforts should be made, in the mean while, to instruct the individual in those acknowledged truths, which have a distant, but direct connection with his false opinions. In this way his mind will be furnished with a mixture of truth and error, instead of error alone; hereafter the discordant elements will be carrying on a conflict of themselves; and his prejudices will certainly be weakened by this inward contest, and probably overthrown.

NOTE. Many writers have examined the subject of prejudices. A number of valuable remarks on this topic are found in Malebranche's *Search after Truth*. Lord Bacon, to whom the sciences are so much indebted, deemed the subject of prejudices deserving a place in the *Novum Organum*, where he has examined them under the designation of *idola*. Dr. Watts in his book of *Logick* has devoted to it a valuable chapter, and also made some remarks on it in his *Improvement of the Mind*. It has recently received new illustrations and embellishments from an article in the *New Edinburgh Encyclopaedia* by M. Simon de Sismondi.

CHAPTER THIRTY SECOND.

EVIDENCE OF TESTIMONY.

§. 418. *Of prejudices in connection with testimony.*

From the view, which has been given of prejudiced judgments, one of the obvious inferences is, that great perversions and mistakes may be expected to exist in testimony.—We have already had occasion to say something of the nature of testimony, and of the grounds of belief in it. (§. 237.) If the subject had not been of importance, it would not have been resumed here; although some of the views just given admit of a ready and weighty application to it.

As to the importance of this form of moral evidence, there can be no mistake. It not only influences our conduct in all our ordinary concerns; but is constantly appealed to, in courts of justice, and in the most serious and weighty transactions. Individuals are frequently required to give testimony, which involves, in its results, the reputation, property, and life of their fellows. But we have seen, in the preceding chapter, in how many ways their judgments are liable to be warped; and that this perversion may often exist without necessarily implying any evil intention.—It is the object of this chapter to suggest a few rules of caution in respect to testimony, drawn chiefly from those susceptibilities in our mental constitution, which are the foundation of prejudices.

§. 419. *Of the competency of the witness.*

Before speaking of those circumstances, which perplex and give a wrong bias to the judgment, a prior inquiry seems to be as to the competency of the witness to form an opinion on that subject, to which his testimony relates.

Witnesses sometimes labour under a natural incapacity of judging, which necessarily annuls their testimony. A person, who is deprived of the sense of hearing, is not capable of testifying to the oral assertions of others; and a blind man cannot give testimony on subjects, the knowledge of which necessarily implies the existence of the sense of seeing. The competency of the witness, therefore, to judge in respect to that subject, on which his testimony is given, is very justly to be examined into.— And in the question of competency, we may not only inquire into the capacity, or want of it in the witness; we may further inquire into his opportunities of exercising that capacity, which he is acknowledged to possess. If he testifies, that he saw an object or action, when circumstances positively show, that he had no opportunity of thus seeing, his testimony is as much invalidated, as if he laboured under a natural incapacity of sight. If, for instance, it be necessarily implied in what he says, that he was in a particular place, but on inquiry circumstances satisfactorily show, that he was not there, then evidently he had no opportunity of knowing what he testifies, and his declarations are to be set aside.

§. 420. *Of habits of veracity in connection with testimony.*

People can hardly expect to hear the truth from those, who are in the practice of uttering falsehoods; and it is, therefore, proper to inquire, What are the witness' character and habits in this respect?—Of professed liars, we have here nothing to say. Of persons, who are in the practice of telling the truth, and whose habits are acknowledged to be those of veracity, a distinction may be made between two classes.

(1) Some men are, in principle and in practice, scrupulous. They have so long and so steadily exhibited this trait, that it seems to be inherent, something in the constitution. Persons of this character are found to be somewhat averse to stating what has not come within their own personal observation and knowledge. When repeating

the assertions of others, they do not incline to conceal their authority, but are desirous that it should be known; and would not, on any consideration, convey a wrong impression. This is their general character, although there is a difference among individuals of this class, and some are found to be less particular in their ordinary asseverations and in testimony, than others.

(2) There is a second class of persons, who would esteem themselves injured in having their veracity suspected, but who have formed habits, which render it necessary, that their testimony should be carefully examined. We allude particularly to the habit, which some have formed of telling extraordinary stories, or anecdotes of whatever kind, which are intended, and are calculated to interest. They consider themselves in a measure pledged to meet the interest, which they know to be excited on the part of those present, and are, therefore, under an extraordinary temptation to enliven and embellish their narration. If any circumstances have escaped their memory, which were essential to the unity of the story, their own invention is taxed to furnish them, since it is too late to search for, and of too much consequence to omit them. They become in time not a little insensible to the false colouring, which they give to their statements, and convey erroneous impressions, without being conscious of an intention to deceive.

Such persons, when called upon to testify on oath, will be likely to give a false colouring to the most serious statements, similar to that, which heightens their discourses to their fire-side hearers. We would not say, that they intentionally do this. But those, who are acquainted with the power of habit, will readily imagine the possibility of their thus doing, without its being implied, that they are designedly untrue.

§. 421. *Of the influence of friendship, &c. on testimony.*

Friendship is generally founded on our favourable opinion of the good qualities of those, towards whom we have

friendly feelings. In the ordinary course of things, no one can be expected to cherish the feelings of friendship towards a person, whom he knows to be a knave, or a hypocrite, or in any other respects essentially bad. Whenever a witness, therefore, is called upon to give testimony unfavourable to the case of a friend, he will find, on a little examination of himself, that his testimony is modified by his own previous feelings and opinions. This modification of our testimony, or rather of the belief and experience, on which our testimony is founded, is often effected with great rapidity, and in almost all cases by a process, to which we yield very slight attention.

Although our own eyes have been the witnesses, we can hardly suspect one, to whom we had ascribed so many good qualities, of committing a crime. We suppose, that we ourselves may be mistaken, and are led, both in consequence of our own supposed liability to mistake, and in consequence of our previous convictions of the criminate person's goodness, to give his conduct the most favourable construction.—The publick testimony, therefore, although given under the most solemn circumstances, will correspond to this very favourable mental construction, which has been previously formed, and of which we ourselves are in a measure insensible.

Such testimony may be critically examined, and without any necessary impeachment of the witness' integrity. If friendship have secretly taken away any thing from the truth, it is the part of the judges, who are the investigators of truth, to see, that it is demanded back again.—The same views will hold, where dislike exists. It has an equal degree of influence in perplexing and prejudicing testimony, with personal friendships.

§. 422. *Influence of personal interest on testimony.*

The love of gain is a passion, which is greatly nourished by many circumstances in our situation. As riches not only deliver their possessors from many inconveniences, incident to a want of them; but secure influence and

respect, we find one reason in these effects of it, why this passion has taken so deep root in the minds of men. An attachment to pleasure, and other modifications of self-love, are hardly less strong, than the passion for wealth.—It is the tendency and result of these interested feelings to present whatever concerns ourselves in the happiest light, and to heap up arguments in our own favour; and on the other hand, to prevent our bestowing due attention or ordinary justice upon the concerns of others.

In all cases, therefore, where the private interest of the person, who gives testimony, is concerned, there are two claims; that of interest on the one side, and that of truth on the other.

The claims of one's own interest, which are so near his feelings, are carefully examined, and every circumstance, which could have an influence to make him act in accordance with that interest, has its full weight. While, on the other hand, we feel an indescribable reluctance to examine claims, which we anticipate will be against ourselves; and ignorance becomes to us, under these circumstances, a source of satisfaction.

Persons, who are placed in this situation, ought carefully to guard against the powerful and sometimes imperceptible influence, which is exerted over them;—an influence, which is often pernicious to their understandings, and still more so to virtue.—Those, who hear and receive the testimony of persons interested, cannot do justice to the person or subject, which this testimony concerns, without making suitable allowance for the misrepresentations, which are found to arise from this source.

§. 423. *Does the testimony come from a partisan?*

There are parties in religion, parties in politicks, parties in neighbourhoods and families, and indeed we find them in almost every situation in life. The feelings of partisanship, which are renewed at every meeting of our opposers, and at the knowledge of every circumstance, calculated to remind us of the existence of a controversy, are exceedingly strong. Hence the prejudices of parties, which

are opinions, modified by these feelings, are tenacious, and conversions for one party to another are few.

It is a remark somewhere made by Hume, that suspicions of a person's being your enemy is one step towards making him such. Generally speaking, partisans have strong suspicions of those of the opposite denomination, and hence it is natural to expect, that there will be much of an inimical spirit. And every one knows, how difficult is a fair and candid statement of the concerns of those, whom we suspect to be hostile, or approaching to enmity. Under the influence of this bias, those who give testimony may be expected to seize upon circumstances, unfavourable to their adversaries, and to throw other circumstances of a different character into the back ground; and yet profess themselves unconscious of a premeditated design to do injustice.

§. 424. *Of the memory in connexion with testimony.*

The great majority of persons have sometimes occasion to complain of treachery of the memory. Facts, which happened some considerable time previous to the testimony given, may not be perfectly recollected.

We may expect, however, that the knowledge of the circumstances of a past event will possess increased accuracy, when it appears, that the person has used such means as assist the memory, such as writing them down, and frequently repeating them.—We may be directed also in our inquiries on this point by the nature of the subject, to which the testimony relates. If the testimony concern words or a discourse spoken, which are peculiarly evanescent, it is far from impossible, that the witness may not perfectly recollect.

There are many circumstances necessarily occurring at the time of hearing the witness' assertions, which will help in forming an opinion of his powers of recollection, but which cannot well be specified here.

§. 425. *On the testimony of the dying.*

It may not be considered irrelevant to the general subject to offer some remarks on the testimony of those, who are thought to be near the period of their departure from the world. Such are generally supposed to utter themselves with a peculiar regard to the truth. It is supposed, that the nearness of the future world, while the present is passing away from them, operates upon them with the power of the most efficient motives, and that, under such circumstances, they will not be guilty of falsehood.

Great weight is undoubtedly to be given to the asseverations of a dying man, who is in the perfect exercise of his reasoning powers; but then our readiness to give credit to them must be regulated by circumstances.—If we make the supposition of the case of a person, condemned to death by the civil laws, the remarks, applicable to such a case, will suggest considerations, applicable to ordinary cases of death.

Let it be supposed, therefore, that a person is condemned to death, that he is about to be executed for some crime, but that he asserts his innocence to the last.

(1) The first circumstance to be considered here is, whether eternal things have any real influence upon his mind, and whether he looks upon death, as about to introduce him into the presence of God. If this be not the case, if God and the day of judgment have no terrors, his assertions are no more to be believed, than the assertions he made before condemnation. It is generally supposed, that the dying utter truth, in consequence of the operation upon them of motives drawn from eternity. But this supposition, under the circumstances now specified, cannot be admitted.

(2) It is to be considered again, whether the criminal have not some lingering hope of pardon. He knows it to be possible for this pardon to come, although it should be only an hour before the time of execution. To make confession, therefore, may be the means of destroying that life, to which he fondly clings; and hence, if he be guilty, he

here finds a strong motive to persevere in his assertions.

(3) There is a third circumstance also to be remembered.—It is sometimes the case, that men, who have been left to commit the greatest crimes, have within them, notwithstanding the commission of such crimes, the remains of truth, honour, and feeling. It does not necessarily follow, because a man has committed those criminal acts, for which justice demands, that he should suffer the severest punishment, that he never has moments of contrition, and aspirations after better things. A person may betray his friend and murder him, and yet, while in the possession of this dreadful obliquity of feeling, may retain the most sincere and devoted attachment to his wife and children. Without having the least expectation of living, he, nevertheless, violently and constantly avers his innocence; one honourable passion yet secures a residence in his dark soul; and he fears a confession may bring a disgrace on his family and descendants, which a denial may possibly avert.

(4) And then there is the additional circumstance of his own reputation.—The love of fame has been spoken of, as being ‘the infirmity of noble minds’; ignoble minds also are beset with the same infirmity. It will be found to have made its way into the hearts of thieves, robbers, assassins. As the time has formerly been, when it was no small honour to perish as a martyr, it is possible, that this time has not wholly past. The man, who has been bad enough to commit piracy, may, therefore, have vanity enough to prompt him to attempt, just as he is leaving the world, an imposition on the sympathizing feelings of the multitude. And it is a real gratification to his self-love, to think, that, at such a time, he can cheat those into a good opinion of himself, or cajole tears from them, whom he would not have hesitated in former days, nor at that very time, if it were possible, to rob or to murder.

We ought not, therefore, to be too confident, that the testimony of the dying is to be always depended on. And yet, notwithstanding these exceptions and cautions, it

would be pushing our ill opinion of human nature to an unwarrantable length, to suspect, in all or even in a majority of cases, the testimony given at the period of death.

§. 426. *Influence of the possibility of a confutation on testimony.*

The distinction between virtue and vice has its foundation in the original constitution of things, but men exercise the right, depending partly on their own susceptibility of judging, and partly on the information of the Scriptures, of saying what things belong to the class of virtue, and what belong to that of vice. Those actions, which are justly accounted vicious, are universally esteemed worthy of blame; while actions, which are truly assigned to the class of virtue, are as generally considered praiseworthy.

The man, therefore, who commits what the community unite in deeming a crime, forfeits his reputation; he turns upon himself the eye of scorn and derision; and becomes, more or less, according to the degree of his offence, a 'his-sing and a byeword.'

Whenever a person utters false testimony, which is reckoned a crime of a very high description, he does it, knowing well the consequences, if a want of veracity should be detected. He will be likely, therefore, to inform himself well of the nature of the subject, on which he testifies, and of the circumstances, under which the testimony is to be given; and if there be a prospect of the false testimony admitting an easy confutation, he will be doubly cautious, how he utters such testimony.—This rule then may be laid down;—Whenever such circumstances exist, that false testimony may very probably be confronted and confuted, there is a corresponding diminution of the probability, that any such false testimony will be given.

§. 427. *On the credibility of historical accounts.*

Of the many errors, which doubtless exist in the greater part of historical narrations, some are owing to the care-

lessness, and some to the prejudices of the writer. The great majority of them may perhaps be traced to these two causes, to want of care, and to feelings, influenced by prejudice. These are points, therefore, of great importance to be ascertained.

(1) We may be aided in forming an opinion, whether the writer was, or was not sufficiently disposed to be exact, by considering the circumstances, in which he wrote.— If the narration at the time of its publication was calculated to excite peculiar interest, and if untrue, to cause contradiction, it may reasonably be supposed, that the care and scrupulosity of the writer will be proportioned to his exposure to examination and to rebuke for any erroneous representations. His own interest, (if we were deprived of any other assurance of authenticity in his statements,) is in such cases a pledge, that he will not make statements without the ability to support them.

Hence we may see, how much credit is due to the writers of the New Testament. They stated facts, in respect to which a very great interest was felt; their narrations were undoubtedly very carefully examined, and as the facts were capable of the readiest contradiction or confirmation, the prevailing disposition to confute them would have availed itself of the first opportunity to do it, if there had been any untruth. What writer, for instance, would have hazarded his reputation on the assertion, that five thousand were miraculously supplied by means of a few loaves of bread, had he not been satisfied of the correctness of the statement? Such a statement could have been at once exposed, and the consequent folly of the writer, if it had not been true.—We justly think, that we have good reason to admit the general truth of the narrations of Livy, of Xenophon, and of other Greek and Roman historians; but there are weightier and more imperative reasons, why we should yield our assent to the sacred writers.

(2) Admitting the historian to have been sufficiently laborious and careful, we are next to take into consideration the prejudices, to which he may have been exposed.—

The character, which, Livy, the Roman historian, gives of Hannibal, is, that he was a man of great cruelty, perfidious and untrue, without any fear of the gods, without any regard to his oath, and without feelings of religion; (*inhumana crudelitas, perfidia plusquam punica, nihil veri, nihil sancti, nullus Deum metus, nullum jusjurandum, nulla religio.*) But there is reason to believe, that this writer speaks in this instance rather with the feelings of a prejudiced Roman, than with that impartiality and coolness, which may justly be expected from historians. If Hannibal had been, born a Roman, possessing and exhibiting, nevertheless, the same traits of character, should we not probably have received a different account? Or if the Carthaginians had furnished native historians of their own battles, would there not have been, (and perhaps very justly,) more credit given to their own nation and fewer evidences of perfidy and deception?—It is a remark of Montesquieu, that it was victory only, which decided, whether we ought to say, the Punick, or the Roman faith.

Among the men, who have obtained great warlike glory on this side of the Atlantick, hardly any name is more frequently mentioned and with greater emotion than Wolfe, the conqueror of Quebec. No one can read his midnight expedition up the heights of Abraham, and the bloody conflict of the ensuing day, without the profound acknowledgment of the heart to the intrepidity and valour of the English general. How often and how enthusiastically has his glory been celebrated!

But a comparative silence and dishonour rest upon the name of the Marquis de Montcalm, who fell on the same field of battle, the worthy rival of Wolfe. And yet he was no less brave, no less generous, no less devoted to his country and his king. The remark of Montesquieu will apply here;—It was victory, which made the difference. Had the French general conquered, Montcalm would have been the hero, Wolfe would have been blamed for his rashness.

NOTE.—In the remarks, which have been made, it is not presumed, that the subject of the evidence of testimony is by any means exhausted. It is a subject, however, which, in many respects, has a close connection with the laws and tendencies of the mind. And it has been our object here, merely to give a few illustrations of it, extracted from the great fountains of human nature. Any further than this, it could not with propriety be investigated in a work, relating particularly to the mind.—For a full investigation of testimony, and of other forms of moral evidence, the reader is referred to the work of Gambier, already mentioned. (See §. 262.)

CHAPTER THIRTY THIRD.

EDUCATION.

§. 428. *Of the meaning and earliest sources of education.*

By EDUCATION we understand all the various methods, by which the mind is furnished with knowledge and its intellectual and moral susceptibilities gradually developed and improved. EDUCATION, therefore, includes those means, by which knowledge is communicated in infancy and childhood; the influence of the examples, which are set by parents and others; the moral and religious principles, which are instilled either by books, or by conversation; instruction in the arts, sciences, and literature. As the process of intellectual culture commences with the very beginnings of existence, Nature has very kindly and providently taken care of it at an earlier period, than can be commenced by man.

The infant no sooner comes into the world, than its mind expands itself for the reception of knowledge as nat-

usually as its delighted eye opens to the beams of the sun. It begins to receive ideas by means of the senses; having no other effectual medium of instruction, than what is immediately furnished by the Author of its existence. The earnestness, which it discovers, as it turns its eye towards the light or any bright object, its expression of surprise on hearing sudden and loud sounds, show, that the work of intellectual development is begun. Not one of the senses is without a share in this work; multitudes of new objects operating upon all of them, become sources of knowledge; hardly at any time, except in the hours of sleep, leaving the mind without occupation. The actions and words of its attendants soon begin to be noticed and imitated; even its sufferings become auxiliary in the great process of furnishing the soul with new notions, and of unfolding its untried capacities.—So that probably in the very first years of its life, there has been a gradual increase of knowledge, as great, when we consider that the mind was at first without ideas, as at any subsequent period,

§. 429. *Of the introduction of imaginary and false ideas.*

While the young mind, by the mere aid of that instrumentality, which the Author of nature has furnished, is continually storing up important thoughts, it also receives false ideas from various sources. These erroneous intimations are not necessarily to be attributed to the imperfection of the senses, or to any thing originally in the constitution; for the child is now supposed to be arrived at that period, when the suggestions of nature may be aided, or counteracted, or misrepresented by parents and domesticks. —In saying, that false notions may be introduced, we allude to the opinions, which children are led to entertain, of the existence of ghosts, spectres, or other imaginary beings. There is no want of true and important notions, which can be made an excuse for the introduction of such absurd ideas; and it ought to be made a great object to keep the mind as free from them as possible.

The greater heed is to be given to this direction, be-

cause permanently evil consequences are found to result from the neglect of it. The introduction of ideas of ghosts, &c. in early life ever afterwards renders one incapable of enduring darkness or solitude with any tolerable degree of comfort.—Attention should be given, in the early periods of infancy and childhood, to the developement of the passions. Those, which are vicious, should be checked and subdued, which can be done much more easily at that time, than afterwards. Virtuous and noble affections should be cherished ; such as gratitude to parents, benevolence to the poor, regard and love for the truth.

§. 430. *Of guarding against prejudices in general.*

A superstitious belief in the agency of spiritual beings in the dark, which is early received, is only one of the many false notions, with which the mind is then liable to be impressed, by means of a wrong intellectual culture. The whole host of errors, which were mentioned in the chapter on Prejudices, may have their origin at the same time ; even errors of a moral, political, and religious nature. It is difficult to assign a period, when the mind is too young and powerless to receive some faint notions on these subjects. Individuals can sometimes state, as far back as their memory can reach, circumstances, (perhaps and accidental remark, perhaps an unimportant religious ceremony,) which have had a permanent influence.

Prejudices so numerous and tenacious are introduced into the mind in childhood, that it requires much pains and time in after life to unlearn the false notions, to which we have been accustomed to render an implicit belief. The struggle against the influence, which they have acquired over us, will be found to be a severe one ; and oftentimes it is quite unsuccessful. Many persons, who have been fully aware of the extent and evil nature of the tendencies, which were given to their minds in early life, have desired to counteract and annul their influence, and have made efforts to that purpose, but without effect. The seeds, that were sown in the nursery, and had borne their fruits in

youth, had taken too deep root to be eradicated in the fullness of years.—We conclude, therefore, that it is a part of all right education, and the duty of all, who are engaged in instructing young minds, scrupulously to guard against the admission of any thing other than the truth.

§. 431. *Of an uniform developement of the mental powers.*

It is a great object, to render the mind comprehensive, and liberal. This object is necessarily defeated, when there is an exclusive attention to one, or even more of our intellectual susceptibilities, to the neglect of others. Consequently, such a degree of culture seems very properly to be bestowed upon all of them, as will secure to them a good share of strength and activity.—Some persons possess imagination in a high degree, and the 'eye in a fine phrenzy rolling;' but the vigour of the reasoning faculty is entirely demolished. They can picture in their imaginations, no less vividly than the writer himself, the scenes of love and war in their favourite romances; but cannot grasp consecutive propositions, and feel the force of an argument. Others are mere reasoners without taste; having the power to conquer demonstrations, but without a soul to feel the touches of sentiment, or an ear for the harmonies of poetry.

We cannot help regarding such an education, which improves some of the intellectual powers, while others are greatly neglected, as erroneous and defective. It tends to defeat the great purpose of life, which is not to establish a superiority in a few individuals over the rest of mankind, but to render all qualified to fulfil, in the best manner possible, the duties of men, of citizens, of members of families, and above all of Christians.

§. 432. *Of diversities in genius and temper.*

Striking differences are sometimes discernible in the temper and genius of youth. It is not always easy to say what they may be owing to, whether to something original in the mental organization, or to some accidental circum-

stances, nor is it of great importance. In the process of education these differences should be regarded, and a preference should be given to those parts of study, for which the mind appears to have a natural inclination.—Not only individuals have mental characteristics, which distinguish them from other individuals; there are also hereditary traits in families, which go down from generation to generation. The members of one family successively discover a fondness for abstract speculation, for all studies, which require the closest application of the reasoning powers; while the successive members of another are distinguished for vivacity, wit, imagination.—But while some reference ought to be had, in the course of an education, to these circumstances, and a preference should be given, in the selection of pursuits, to such personal and hereditary inclinations, there should be the greater caution in seeing that other pursuits, to which there is supposed to be a natural aversion, be not wholly neglected. The man of imagination is not to leave his reasoning powers to neglect; nor should the lover of mathematics forego those methods of intellectual culture, by which the taste may be quickened and improved. An exclusive attention to a particular pursuit, even when it seems to be warranted by the high claims of genius, would be inconsistent with that development and exercise of all the intellectual powers, which we conceive to be implied in a perfect education.

§. 433. *Of moral and religious education.*

It ought not to be forgotten in the early periods of education, that man is a moral being, and that he is, even in the commencement of life, susceptible of instruction in the distinctions of right and wrong. The doctrine, which Rousseau and others have studiously advanced, that childhood and youth are incapable of receiving moral and religious ideas, has provoked an indignant and triumphant opposition. It is both unsound in point of fact, and most pernicious in its tendency. All experience goes against it.

In France, where it has found its most numerous advocates, its evil results have been very deeply felt. A recent French writer, who cannot be suspected of giving unfavourable representations of his countrymen without a cause, thinks, that the widely spread domestick corruption and miseries, which he acknowledges to exist, can be corrected only by a greater attention to early moral education. This remark implies, that the origin of those evils is to be found in the neglect of such education.

As a first great principle in morals and religion, let the minds of youth be taught, that there is a God. It is true, they will not understand his nature ; But does any one understand it ? Can the most mature and enlightened mind explain the mysteries of the Supreme Being ? But even children may have notions of God, which approach more nearly to truth than we are aware, although we are unable to say precisely how far. Let the existence, therefore, of the Supreme Being be carefully inculcated from the first moment, when access can be had to the mind. Let it be associated with the rising and setting of the sun ; with woods and waters ; with that starry sky, which elevated the devotions of the Psalmist ; with all the appearances of nature.—When the young have become impressed with this idea, the natural consequence will be, that they will feel themselves under control and government, when absent from parents, guardians, and instructors. They believe, they remember, that there is a Being every where present ; and this belief will be found to operate as a powerful restraint on evil propensities and actions.

Having begun with the idea of a God, they should next be instructed in suitable portions of the Bible, that great system of duty, submission, and hope. It is no serious objection, if they do not fully understand the import of every passage, which is read, or committed to memory. Something will be understood, which will be valuable in the end ; and the more so, because it will be associated with all the delightful recollections of early days. It is this part of education, which most effectually promotes individual happiness, making life comfortable amid all its

roughnesses and trials ; which maintains peace in families, and affords security to the commonwealth. In general, no length of time, no change of circumstances wholly destroys its propitious influence. And without it, without a belief in the existence of God, and a high sense of accountability, all sciences will be in vain ; all other attainments will utterly fail of making men happy, and widely useful.

Multitudes of illustrations might be introduced to confirm the views of this section. How natural is the following incident ! And how agreeable, therefore, to sound philosophy !——“ When I was a little child, (said a religious man,) my mother used to bid me kneel beside her, and place her hand upon my head, while she prayed. Ere I was old enough to know her worth, she died, and I was left much to my own guidance. Like others, I was inclined to evil passions, but often felt myself checked, and as it were drawn back by the soft hand upon my head. When I was a young man, I travelled in foreign lands, and was exposed to many temptations, but when I would have yielded, *that same hand was upon my head*, and I was saved. I seemed to feel its pressure, as in days of my happy infancy, and sometimes there came with it a voice in my heart, a voice that must be obeyed—Oh, do not this wickedness, my son, nor sin against thy God.”

§ 434. *Of education for particular arts or professions.*

When men first flowed together into societies, they justly anticipated, that the wants of one would be supplied by the labours of another. As all could not devote themselves to one calling, different pursuits were chosen by different individuals. In making their choice, they were influenced by a variety of circumstances ; by the wants of the community, by the wishes of their associates, or by their own predilections ; and hence we find the whole community divided into arts, or professions.

In prescribing a course of study, regard should be had to the calling, which the person has in view ; and it should be suited, as much as possible, to promote the objects of

that calling. It would be absurd, therefore, for a youth, intended for some mechanick art, to spend any length of time in the acquisition of languages, which might be very proper and important in a merchant, lawyer, or theologian.—But then we would not have such an one exclusively limited to those sciences, which have an immediate relation to his business in life. Let such sciences have a great share of his attention, but not all.—Mechanicks should remember, that they are men, as well as artisans; and while they must give up much to their work-shops, they owe not a little to their friends, to their families, and to society. If they are disposed to, they can save many fragments of time from their appropriate callings, which may be profitably employed in disciplining all the mental powers, and in the improvement of the social and religious affections.

§. 435. *Formation of intellectual habits.*

The term, HABIT, may be applied either to bodily or mental operations, and expresses that readiness or facility, which is found to be the result of frequent practice.—By practice, the limbs of the body may be strengthened, and may be brought to perform a variety of admirable motions. Rope-dancers, and the performers of the circus exhibit feats, which would seem incredible, were we not led to expect almost any thing from the formation of habits. The results of intellectual habits are not less striking than those of the body; the mind can be raised up to its highest excellence only by repeated actions. Many traits, such as a turn for punning, for diverting stories, for imaginary creations, for close reasoning, which are thought to be natural, are caused wholly by a repetition of the same acts.

This great law of the mind, that it is susceptible of habits, or that it acquires a facility of doing merely by the repetition of doing, is of no small practical value in the conduct of education.—If the student would become a good writer, he must form a habit; that is, he must acquire

a command of words, and a ready perception of what is beautiful or deformed in the combinations of thought and of language, by frequent practice. If he would become a ready speaker or reasoner, he must use himself to the task of connecting together his thoughts in arguments, and of expressing them in unpremeditated diction. If he would possess the power of framing at will ideal creations, it can only be done by a frequent exercise of the imagination.—You may give to the pupil all the rules in the world ; you may succeed in making him fully understand the propriety of them ; and they will utterly avail nothing, unless he shall set his own mind at work, and not only go through with a series of mental operations, but continue to repeat them, until a facility is acquired.—Here is the secret of excellence ; in frequent, and consequently laborious repetition. It is in this way, that good poets, good orators, mathematicians, painters, &c. are formed. In multitudes of instances a want of excellence is to be ascribed, not so much to any defect of nature, as to a repugnance to the formation of intellectual habits. And this is much the same as to say, that in all such cases the true occasion of mental inferiority is indolence.

§. 436. *Of a thorough examination of subjects.*

There is great difference between a superficial, and a thorough education ; between a mere smattering, and a sound knowledge of things. Owing partly to laziness, and partly to the vanity of appearing to know every thing, multitudes dissipate their time in skipping from one sort of knowledge to another, and in forming a slight acquaintance with all, without a full understanding of any. It is thought by many, that this is particularly the vice of the present times ; and that there has been a diminution of laborious and thorough scholarship, in proportion as books have multiplied, and there has been a wider dissemination of knowledge among all classes.—One part of education is the storing of the mind with new ideas ; another, and not a less important one, is the giving to all the mental powers a suitable discipline ; exercising those, that are

strong ; strengthening those powers, which are weak ; maintaining among all of them a suitable balance. A thorough examination of subjects is an education, or training up of the mind, in both these respects. It furnishes it with that species of knowledge, which is most valuable, because it is not mixed up with errors ; and, moreover, gives a strength and consistency to the whole structure of the intellect. These facts are highly worthy of being regarded in the conduct of the understanding.

The direction, which we would deduce from them, is, that the student be made to go to the foundation, the ultimate principles of every subject. Almost every topic, which is worthy of being examined, has its difficulties. The mind, when unaccustomed to patient labour, discovers a disposition to fly off, and not to meet them. This feeling must not be yielded to ; but however reluctant, the mind should be again and again brought up to the attack, until the difficulties be overcome. It is not to be supposed from this, that the student's efforts are to be limited to one department of science exclusively ; it is merely meant, that he ought not to be permitted to go from one department of knowledge to another or from one subject to another, without thoroughly understanding, without going to the bottom of them.

This practice once adopted will become in the end easy and delightful. The love of truth will be strengthened, and become a mighty principle ; the mind will approach difficulties with greater firmness and readiness ; and toil itself will no longer be a source of uneasiness.

§. 437. *Of a command of the attention.*

Those, who are required to follow the directions above given as to a thorough examination of subjects, will sometimes complain, that they find a great obstacle in their inability to fix their attention. They are not wanting in ability to comprehend, but find it difficult to retain the mind in one position so long, as to enable them to connect together all the parts of a subject, and duly estimate their various bearings. When this intellectual defect exists, it

becomes a new reason for that thorough examination of subjects, which has been above recommended. It has probably been caused by a neglect of such strictness of examination, and by a too rapid and careless transition from one subject to another.—ATTENTION expresses the state of the mind, when it is steadily directed for some time, whether longer or shorter, to some object of sense or intellect, exclusive of other objects. All other objects are shut out; and when this exclusion of every thing else continues for some time, the attention is said to be intense.—It is well known, that such an exclusive direction of the mind cannot exist for any long period, without being accompanied with a feeling of desire or interest. In the greatest intellectual exertions, not the mere powers of judging, of abstracting, and of reasoning, are concerned, there will also be a species of excitement of the feelings.—And it will be found, that no feeling will effectually confine the minds of men in scientific pursuits, but a love of the truth.

Mr. Locke thought, that the person, who should find out a remedy for the wandering of thoughts, would do great service to the studious and contemplative part of mankind. We know of no other remedy, than the one just mentioned, A LOVE OF THE TRUTH, a desire to know the nature and relation of things, merely for the sake of knowledge. It is true, that a conviction of duty will do much; ambition and interest may possibly do more; but when the mind is led to deep investigations by these views merely, it is a tiresome process, and after all is ineffectual. Nothing but a love of the truth for its own sake will permanently keep off the intrusions of foreign thoughts, and secure a certainty of success. The excellency, therefore, of knowledge, considered merely as suited to the intellectual nature of man, and as indicative of the character of that Being, who is the true source of all knowledge and the fashioner of all intellect, cannot be too frequently impressed.

The person, who is capable of strictly fixing his attention, will have a great advantage over others. Of two

persons, who seem naturally to have equal parts, the one, who possesses this quality, will greatly excel. So that it is hardly too much to say, that it may become a sort of substitute for genius itself.

§. 438. *Physical education or the regard to be had to the body.*

Although education, as the term is commonly employed, has particular reference to the growth and expansion of the intellectual powers, the objects, at which it aims, cannot be fully secured without attention to the body. It is important, that the physical system should be sustained in force and activity. And where this precaution is neglected, where the bodily constitution is permitted to contract diseases, or rapidly to wear itself out from mere indolence, the objects of education are not only not secured, but defeated. Life is shortened; the mind becomes inert; and oftentimes is irrecoverably prostrated.

Laying, therefore, out of view all other considerations, it seems of great consequence, that attention should be given to the growth and discipline of the physical powers, as a mere auxiliary to the bringing out, and disciplining of the mind.

§. 439. *Of social intercourse as a means of improvement.*

It can hardly be expected of a professed scholar, who must spend very many hours in solitary retirement, that he will appear to as much advantage, as one, who lives continually in polite society. But the evil effects on his address and manners might be overlooked, were it not, that an awkwardness and singularity may be impressed upon the mind from the same cause. The feelings, the opinions, and the taste of persons, who have mingled but little in society, differ in many respects from those of the mass of mankind around them.—To meet, therefore, with others at suitable times, to enter into conversation and to compare opinions with them in argument, may be recommended, as a part of intellectual culture. In this way,

new light may be thrown on many subjects ; the faculties acquire a degree of readiness and vivacity, which will turn to good account, when they are pressed by sudden emergencies ; odd and singular notions will be extirpated.— But if this direction be important to professed scholars, who are justly expected to remain much with their books, it is still more applicable to those, who go through a course of education, merely to prepare themselves for the world, and that they may the better discharge the duties of a man and a citizen among their fellows.

§. 440. *Of the education suitable to a citizen.*

There are some parts of education, which can be less safely omitted, than others ; and particularly that, which regards man as having certain social and civil rights, or as a citizen. In all legitimate governments, monarchical as well as republican, the will of the people is law ; they are the source of all rightful authority, and the seat of judgment, to which it must render up its account.—Hence there is a political importance attached to every individual ; not merely to the learned civilian, but to every farmer, mechanick, day-labourer. They may at times be concerned directly, and at the election of their rulers are always concerned indirectly, in the management of the affairs of the whole nation ; in the enactment of commercial regulations, in the adjustment of boundaries, in the formation of treaties.

Every man should be taught from his childhood up, whatever may be his calling, or his standing in life, that he is a participator in these things, and that he has not only the unalienable rights, but the unalienable duties of a citizen. These ideas give to man a new character ; they elevate him from his degradation ; throwing the mind open to grand views, giving breadth and comprehension to the feelings, and honourable sentiments. We do not undertake to state in what way, or by the aid of what treatises, this part of education is to be conducted ; but only that an undue neglect of it is an unwarrantable contempt of

the calls of the age, and a violation of the demands of human nature.

§. 441. *Of arithmetick, geography, mathematicks, &c.*

In the remarks, that have hitherto been made, we have taken precautions against the admission of early prejudices. Rules have been given with reference to the institution of a salutary mental discipline, with such remarks on the consideration of man, as a moral being and a member of society, as seemed to have a bearing on this important subject. We now suppose, that the mental powers of our pupil have become in some degree expanded, and in good exercise; and there are spread before him many departments, which present claims on his attention of greater or less urgency. Something will be said on the study of languages in the next section; a few remarks on some other departments of study will be made here.

ARITHMETICK—This branch of study presents claims to attention. The difficulties, which are to be met with in this pursuit, are generally not greater, than can be overcome by the minds of young persons. It affords a good exercise to the reasoning powers, and helps to form habits of precision, arrangement, and classification. In cases where no foreign language is studied, we think of no department of knowledge, which affords a better discipline to the young mind. Very much, however, depends upon the manner, in which it is taught.

GEOGRAPHY—This science may also be studied at an early period. It interests curiosity; gives employment to the memory, and is a fruitful source of new ideas. Peculiarities in the climates of different countries, traits in the character of the people, and striking curiosities naturally fall within the limits of this science. It is probably not so much the fault of the science as of those, who teach it, that with too many pupils the knowledge, which they get, is a mere record of names.—At a somewhat later period, some departments of natural history may be attended to. Treatises on plants and animals are found to possess a great

interest for the young mind ; and the information, which can be obtained on such subjects, is not less valuable than interesting.

MATHEMATICKS—In a course of liberal education, mathematical studies deservedly hold a distinguished rank. Many have thought, that if we would enjoy the use of our mental powers in all their perfection, we must devote much time to sciences, admitting of demonstration. Such sciences enable the mind to conceive with clearness, by forming a habit of distinguishing one idea from another ; they quicken the susceptibility of judgment, and operate as a wholesome check on flights of imagination.—Allowing to mathematicks the credit, to which it is entitled, it is but just to remark, that in one respect its influence is less favourable. Persons, whose minds are exclusively trained up to demonstrative reasoning, are liable to be perplexed and at a loss on subjects, which are not susceptible of demonstration. Their minds have been so long guided by the evidence of intuition, that when left to the helps of moral evidence merely, to circumstances and testimony, they are perplexed and uncertain to a degree, which appears surprising to others, who have subjected themselves to a different sort of discipline. (Sec §. 230.)—It is a circumstance much in favour of mathematical studies, that they are subservient to the pursuit of most of the other sciences ; particularly of the different branches of natural philosophy.

HISTORY.—At a later period than the studies, which have been mentioned, comes that of history. A slight acquaintance may have been previously formed with the annals of one's own country, and perhaps something more. But a valuable knowledge of history implies much more than this. No one can have such an acquaintance with history as is desirable, without first informing himself of the characteristick properties of human nature. He must have studied the mind of man ; the intellectual laws, to which he is subject ; the motives, which influence his conduct ; the passions, which agitate him. A knowledge of the doctrine of human rights, and of the principles of na-

tional policy and intercourse are also necessary. History, when studied under these advantages, possesses the highest interest and importance.

§. 442. *Of the study of languages.*

The study of languages, more particularly of the Greek and Latin, has long been made a part of education. The reasons, which are commonly given for occupying a considerable portion of time in this way, are chiefly these.

(1) Much information is locked up in these languages. The original Greek and Roman literature is of itself highly valuable; their poets, historians, and orators, are worthy of being compared with those of any age or nation. In addition to this, vast numbers of literary and other treatises have been written in the Latin language in later periods, particularly on the readings and interpretation of ancient authors, and on obscure and difficult points of history. A person ignorant of that language is shut out from the greater part of these important documents.

(2) The intercourse of the world has been so much increased in consequence of the spread of knowledge and the facilities of commerce, that an acquaintance with some of the modern languages, particularly the Spanish, Italian, and French, is considered highly desirable. An entire ignorance of all modern languages is thought to imply a very defective education. But the languages, which have been mentioned, together with the Portuguese, have their origin in great part from the Latin; and can be more easily and perfectly learnt by previously giving some attention to the parent dialect, than by attempting them without it.

(3) No one, who speaks the English language, can deny the importance of a thorough knowledge of it. It embodies, and retains the vast wisdom of many good and learned men; and is the medium, by which the thoughts and feelings of our own generation and of our own hearts are to be communicated. But in the knowledge of this language, the student will find himself assisted by an acquaintance with the Latin; inasmuch as about one half of the words

in the English language are derived from that source.—The Greek, which is a source of many English words, has a similar argument in its favour; and the additional circumstance of being the original language of the New Testament.

(4) The study of languages answers a good purpose, as a sort of basis of education. During the period from eight to eleven years of age, the intellect may be supposed to be developing itself under the mere guidance of nature. It is a great point in education to aid this developement, to keep the mental powers in exercise, and to promote their growth. This object is known to be secured by the study of the languages in a high degree; certainly much more than by the study of ethicks, history, mineralogy, chemistry, &c.; or even by the more appropriate study of arithmetick. It is thought, that the object cannot be secured, in so high a degree, by any other course of study whatever, which can be pointed out.

(5) It has also been strongly contended, that an acquaintance with any language is a valuable acquisition, because it opens up new views of mental character. The language of every nation is modified by the exigencies of the people, who speak it; and by individual and national traits. It embodies their emotions, customs, prejudices, domestick and political history.—No man, therefore, can make himself fully acquainted with a new language, without having more correct and broader views of the developement of the mind, of the progress of men, as they rise from barbarism to refinement, and of human nature in general. And these advantages can be secured by the study of the Greek and Latin languages, no less than by others.

In view of this subject, all, that remains to be said here, is briefly this;—There can be no objection to changes in existing systems of education, whenever good reasons can be shown for making them, whether they concern the study of languages, or any other part of education. On the contrary, systems of instruction ought to be examined into, and all improvements, of which they are susceptible, should be made. The above statements, however, in favour of

the study of the classick languages, show, that the advocates for retaining them, as a part of the methods of liberal education, do not give this preference to them without some good grounds.

§. 443. *Of education in connection with the progress of science.*

The progress of education ought to keep pace with the progress of the sciences; and when the sciences are advanced, and are spreading abroad their light, the mass of intellect, the minds of the great body of the people, ought not to be kept back in the twilight of former ages. It has been remarked and not without reason, that a young man, on completing his studies at a modern seminary, may have made himself acquainted with those principles of mathematicks, in the acquisition of which the profound Newton spent his life. A similar remark may be made in respect to all the departments of knowledge. The vast multitude of facts in physicks have been reduced to order, and all the sciences, founded on observation and experience, have been compressed, as it were, into a smaller space. What was the extent, the ultimate boundary of knowledge in one age, and was reached only by the most powerful minds, becomes in the succeeding age elementary, and makes a part of the rudiments of education.

In conducting, therefore, the process of education, it is of less consequence to inquire what was believed, and what was known in the sciences in former ages, than to inquire what is believed and known at the present moment. There are thousands of treatises, which were once valuable and entitled their authors to great credit; but have now lost their interest, and have no claims to be put into the hands of the student. It is true, they are the documents, out of which a history of the progress of the human mind is to be formed, but they are out of place in those systems of practical education, the object of which is to enlighten the minds of the great body of the people.

END.

